

THE MORPHOLOGY OF
KOINE GREEK

SUPPLEMENTS TO NOVUM TESTAMENTUM

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E. J. BRILL

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THE MORPHOLOGY OF KOINE GREEK

AS USED IN THE APOCALYPSE OF ST. JOHN

A STUDY IN BILINGUALISM

BY

G. MUSSIES



LEIDEN
E. J. BRILL

1971

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CHAPTER ONE

INTRODUCTION

1.1. *Problems*

Like all the texts that have come down to us from antiquity the Apocalypse of St. John posits in principle four kinds of inter-linked problems, namely the problems of interpretation, text-composition, dating and authorship. To each of these we shall devote some short remarks by way of illustration, referring the reader to the numerous commentaries on the book for fuller details.

1.1.1. The *Problems of Interpretation* in the wider sense are with regard to this enigmatic book almost as numerous as the variegated images and the many symbols which St. John makes pass our mind's eye. Their exact signification, for instance the meaning of the beasts in XIII 1 ss., and the riddle of the mysterious number 666 in XIII 18, to mention only these, are questions that have been dealt with by a long series of commentators which started perhaps with Justin Martyr (*fl.* 150 A.D.) and goes on till the present day. Besides such greater problems, there are of course also many minor ones such as the syntactical connection of words in some passages. It has been a subject of discussion whether, for instance, the words ἀπὸ καταβολῆς κόσμου in XIII 8 (and XVII 8), "from the foundation of the world", should be connected with γέγραπται "have been written", or with τοῦ ἐσφαγμένου "that has been slaughtered" etc. etc.¹

1.1.2 The *Composition* of the Apocalypse, especially its unity of composition, was soon questioned, because the order of the events to which the different visions were supposed to refer, raised chrono-

¹ The version of the Dutch Bible Society seems to suggest the combination with ἐσφαγμένου. This solution is also adhered to by G. Sevenster, *De Christologie van het Nieuwe Testament*, Amsterdam, 1946, p. 278 n. 5 on the ground of the order of the words. On the other hand the Gospel of Truth, p. 19 line 35 - p. 20 line 2 (*ed.* Malinine-Puech-Quispel, Zürich, 1956) implies already the combination with γέγραπται (*cf.* W. C. van Unnik, *Het kortgeleden ontdekte Evangelie der Waarheid en het Nieuwe Testament*, Med. Kon. Ned. Ak. Wet., *Letterk. N.R.* 17, nr. 3, Amsterdam, 1954, p. 19). The golden mean is defended by E. Lohmeyer, *Die Offenbarung des Johannes*, Hdb. z. N.T., 16, Tübingen, 1953, 2nd ed., *ad locum*; according to this author the passage would be ambivalent on purpose.

logical difficulties. Consequently, several solutions have been proposed, like the so-called *recapitulation theory*, which has been en vogue since Victorinus of Pettau (ob. 303 A.D.) and implies that each of the successive groups of visions, namely those of the seven seals, the seven trumpets and the seven bowls, foretells one and the same sequence of events. Another theory, the *fragments theory*, was initiated by Hugo Grotius, who supposed the Apocalypse to be a combination of originally separate visions, of which he maintained, however, that they had been seen by one and the same man.¹ After him many commentators have assumed interpolations, emendations, dislocations of whole passages, and dependence on sources, in order to solve real or alleged inconsistencies in the text or in the author's idiom.² The less extensive but not necessarily less important problems which come under this heading are the many questions of textual criticism. Some of these are of great importance because they involve considerable differences in meaning. The mysterious number in XIII 18, for instance, to which we referred above, differs according to manuscript: in *ms. A* it is "666", but in *ms. C* "616", an uncertainty in the text tradition that has of course resulted in a great number of identifications with different historical persons.

1.1.3. The *Date* to which one assigns either the work as a whole or the separate visions chiefly depends on the solutions that one has accepted for the above mentioned problems. The procedure usually followed in order to get some chronological hold on the book is to identify the horns of the *Beast* in XVII 10-11 with some sequence of Roman emperors. The context explicitly states that these horns symbolize βασιλεῖς and an extra detail is even given with regard to the seventh king: he is to stay for a short period only.

1.1.4. *Authorship*. The most important questions asked in this connection are "Is *John of Patmos* (I, 1) identical to the *Gospel-writer*?" and "Is he (or either of these) the same person as the

¹ *Annotationes ad Novum Testamentum*, 1644.

² We mention only: G. J. Weyland, *Omwerkings- en Compilatie-Hypothesen toegepast op de Apokalypse van Johannes*, diss. Groningen, 1888 (i.e. Theories of Rewriting and Compilation applied to the Apc); R. H. Charles, *The Revelation of St. John*, Intern. Critical Comm., Edinburgh, 1920, who changes to a considerable extent the order of the passages in the last three chapters; P. L. Couchoud, *L'Apocalypse*, Paris, 1930, who considers the chapters XVII-XXI 8, and XXI 9-XXII 21 to be two different versions of the end of the Apocalypse.

Apostle? It is especially the former that one has tried to answer by adducing arguments from the fields of linguistics and stylistics. On the whole scholars have confined themselves in this respect to discussing incidental facts, in this way neglecting to give an overall picture of the author's style and language. This shortcoming has been pointed out with emphasis by R. H. Charles, whose own description has probably been the most extensive work of its kind, and has resulted in immediate improvements in the field of exegesis. His description, however, is not complete, especially¹ not if measured by the new demands resulting from the developments in linguistics of the last fifty years. For a solution of the problems sketched and for a fruitful comparison with the contemporary use of language (as far as it does not imitate that of Classical authors) it is absolutely necessary that the linguistic description be as complete as possible. It is therefore our purpose to extend Charles' description to subjects not yet discussed or not sufficiently treated of, and to compare the result thus obtained with the morphological system of non-literary Koine-Greek, so as to discover the facts that are peculiar to the Apc. In this way we also hope to further in a general way the exegesis of the book. Originally we intended to discuss syntax as well, but seeing that the parts devoted to phonology and morphology grew more and more extensive, we have abandoned this plan and hope to deal with the syntactical peculiarities in a separate volume or in articles. Before starting on our enterprise it may be interesting and important to survey the observations of a linguistic or stylistic character that have already been made on this last and puzzling book of the New Testament.

1.2. *A Short History of the Study of Language and Style of the Apc*

1.2.1 *Antiquity.* The first person known to have adduced linguistic arguments in order to answer the theological questions raised by the book was Dionysius bishop of Alexandria (247-265 A.D.). He had to cope with a separatist movement in his church and with other troubles that had been started by a certain Nepos who may have been a bishop in the Arsinoite nome. This man had written a work entitled Ἐλεγχος Ἀλληγοριστῶν or "*Refutation of the Allegorists*" which contained chiliastic ideas and provoked an answer from Dionysius called Περὶ Ἐπαγγελιῶν "*On Promises*", in which he discussed *a.o.* the Apc. After Nepos' death a man named Korakion

was the leader of the sectarians, whose views were disputed by Dionysius in a church meeting and successfully so: his opponent gave in and that was the end of the movement. The story is told by Eusebius (*Hist. Eccl.* VII 24-25) who also quotes from Dionysius' lost work. The most important quotations, somewhat literally translated, are:

VII 25, 17, on the authors of the 4th Gospel and the Apc.: "*But on account of the words (ῥημάτων) and their arrangement (συντάξεως) it is likely that the latter (John of Patmos) must be held different from the former (the Gospel-writer). 18. For the Gospel and the (1st) Letter are conform and begin alike: the Gospel says: In the beginning was the word . . . , and the Letter: What was from the beginning . . .*"

VII 25, 25, on the language: "*For they (the Johannine writings) are written not only faultlessly according to the language of the Greeks, but also in a very eloquent way (λογιώτατα) with regard to the words (λέξεις), the reasonings (συλλογισμοῖς), and the arrangements of exegeses (or: exegetical combinations: ταῖς συντάξεσιν τῆς ἐρμηνείας), let alone that a barbarism (βάρβαρον φθόγγον), a solecism (σολοικισμὸν), or in short, a vulgar expression (ἰδιωτισμὸν) is to be found in them*". Evidently the Apc. is not devoid of such shortcomings. VII 25, 26, on the language of the Apc.: "*That he may have seen revelations and may have received knowledge and insight (γνώσιν καὶ προφῆτειαν) I shall not deny, but as to his style and language, I see that they are not purely Greek, and that he makes use of barbarous turns and even commits sins against grammar, which need not be summed up now . . .*"¹

This criticism owes its importance to the circumstance that it has been passed by a person who spoke Greek in his daily life, and was separated from the Author of the Apc. by a shorter lapse of time than we are. All the same we must be aware of the fact that this interval is still as long as that between Byron (1788-1824) or Goethe (1749-1832) and our time. It is interesting to see that Dionysius' views were taken up and redefended as late as the XIXth century. In passing we may remark that the scanty quotations from the Apc. found in the fragments of his work do not enable us to get some impression of the type of Bible text that he used, but it is worth mentioning that at Apc. I 1 the words ὁ θεός were probably absent (cf. Eusebius VII 25, 9).

¹ Eusèbe d'Alexandrie ed. G. Bardy, Sources Chrétiennes 41, Paris, 1955.

I.2.2. *XVIIth-XVIIIth Century.* The scattered grammatical remarks *ad locum* that are contained in the immense number of commentaries on the Apc. and in the different grammars of New Testament Greek cannot be summed up here.¹ These grammars, moreover, do hardly display the linguistic characteristics of the individual N.T. authors. We can make mention of those scholars only who have made special remarks on the (use of) language of the book as a whole. The numerous Hebraisms, too, that were detected in the Apc. and in the rest of the N.T. by the XVIIth century Hebraists must remain unmentioned. For these observations we refer to Rhenferdus' *Dissertationum Philologico-Theologicarum de Stylo Novi T. Syntagma*,² which is a collection of essays written both by Hebraists and by Purists. In it we find an important article written by J. Boeclerus, who was perhaps the first to point out that with regard to the question of the Semitisms in the N.T. *frequency* is often the only relevant criterion: "*Non est quaestio: An phrases & verba, quae in N.T. occurrunt, è perreptatis Scriptorum profanorum monumentis possunt erui? Sed: An tota dictionis indoles, faciesque stili, totumque orationis corpus conveniat cum ea Graecitate, quae in profanis Scriptoribus occurrit? . . . Sed & illud non debuit negligi: longe diversam esse utendi rationem, cum locutione eadem haec lingua utitur ordinarie & consueto more suo; illa extra ordinem, ut sic dicam, & raro, nec sine figura aut ἀνωμαλία.*"³

Only in 1763 do we again encounter some remarks on the Apc., which deserve the name of a linguistic characterization of the book, namely those made by J. A. Bengel: "*In summa, HEBRAISMUS toto regnat libro, prima specie insolens & asper, sed revera, cum assueveris, non solum tolerabilis, sed etiam dulcis, ac plane coelestis stilo curiae dignus.*"⁴ Among other things Bengel points to the phenomenon of the incongruous nominative appositions. This observation is also made by H. H. Donker Curtius, who compared the Gospel of St. John with the Apocalypse, especially with regard to vocabulary and

¹ Short sketches are given in the grammars of Moulton-Howard, II pp. 33-34, Radermacher p. 87, and Blass-Debrunner, *par.* 136.

² Leeuwarden, 1701.

³ "*De lingua Novi Testamenti originali Brevis Dissertatio*" originally edited at Strasbourg in 1642 (in Rhenferdus' collection p. 133, *par.* 27 and 28). Cf. M. Black, *An Aramaic Approach to the Gospels and Acts*, Oxford, 1967, p. 50 s. and J. Ros, *De Studie van het Bijbelgrieksch van Hugo Grotius tot Adolf Deissmann*, Nimeguen-Utrecht, 1940, p. 32.

⁴ *Apparatus criticus ad Novum Testamentum*, Tübingen, 1763, p. 488.

parallel texts. As to his conclusions it suffices to read the title: *Specimen hermeneutico-theologicum, de Apocalypsi ab indole doctrina et scribendi genere Iohannis Apostoli non abhorrente*.¹

1.2.3. XIXth Century. Passing over the short remarks made by Abauzit and Herder² we arrive at the work of P. J. S. Vogel, the *Commentationes VII de apocalypsi Joannis*, which appeared from 1811 to 1816. Like Donker Curtius he had a definite purpose in mind: he wanted to demonstrate that the Apc. was composed of different parts that could be distinguished by language and style.³

Next comes G. B. Winer's *disputatio: de soloecismis qui in Apocalypsi Joannea inesse dicuntur*, in which he contends that the solecisms are due to St. John's ecstasis and must be seen as a characteristic of his prophetic style.⁴ The most important contribution of this century is undoubtedly the commentary written by G. H. A. Ewald,⁵ which includes a separate chapter on the language entitled *De linguae indole*. The introductory remark of this survey says that all that deviates from the usual Greek is either to be explained as Hebraism or Aramaism: "*ex Hebraeismo et Aramaeismo fluunt*". Among the phenomena signalled by Ewald we find: the curious variation of verb tenses, the repetition of a preposition in a series of substantives, the low frequency of the genitive case with verbs, the instrumental use of ἐν, the occurrence of various case categories with one and the same preposition without semantic difference, the low frequency of compound verbs, the resumptive pronouns, and the peculiar stylistic shift from participle to finite verb in a number of sentences (II 2, 9; III 7, 9, XX 4). The last mentioned phenomenon

¹ Utrecht, 1799 (thesis).

² (F.) Abauzit, *Discours historique sur l'Apocalypse*, London, 1770, p. 44: "On ne sauroit nier que le stile de l'Evangile & des lettres de St. Jean ne soit plus pur que celui de l'Apocalypse: cependant on y trouve quelquefois les mêmes expressions . . .", and p. 45: "Si l'auteur de l'Apocalypse n'est pas St. Jean, du moins il a bien voulu qu'on le prît pour lui"! J. G. Herder, *MAPAN AΘA. Das Buch von der Zukunft des Herrn, des Neuen Testaments Siegel*, Riga, 1779 (ed. B. Suphan, Berlin, 1893, IX, p. 274): "Was die Sprache des Buchs betrifft, so mag sie immer Ungriechisch seyn; sie ist nur etwas mehr als die übrigen neuen Testaments Schriften." — "Die Seele des Schriftstellers arbeitet nehmlich unter der Last der Ebräischen Prophetensprache: er will, was sie sagt, auch eigenthümlich, wie sie sagen: er kämpft, er bricht mit der Sprache."

³ We know this work only from quotations by Lücke: see below.

⁴ *Disputatur de Soloecismis qui in Apocalypsi Joannea inesse dicuntur*, Erlangen, 1825. Cf. Herder and later S. Davidson, *Introduction to the New Testament*, London, 1851, III, pp. 565-571.

⁵ *Commentarius in Apocalypsin Iohannis exegeticus et criticus*, Leipsic 1828, pp. 38-46.

was therefore noticed a century before Charles, who thought that it had been overlooked up to his time;¹ nevertheless the latter's criticism of the incorrect rendering of such passages can be maintained: evidently the results laid down in commentaries penetrate the N.T. versions only slowly.

Ewald's survey was taken over by F. Lücke in his important work on the Apc., the opinion of both these scholars being that the apostle St. John cannot have been the author of the book.² In his later commentary on the Johannine writings Ewald does not make any additions to his former analysis, except for the discussion of series of substantives separated by καί's and belonging to the same case category. Instances are given of 2, 3, 4, 5 and more successive substantives, which, to be true, are often more or less synonyms of each other.³

F. Hitzig defends the thesis that the Gospel of St. Mark and the Apc. have been composed by one and the same person, who would be nobody else but John Mark.⁴ He does so by pointing to lexical, morphological and syntactical similarities; wordorder, however, is hardly discussed, although it is exactly in this field that the two books differ considerably. The similarities mentioned can be explained, we believe, from the fact that the use of language of both works belongs to about the same social layer of Koine Greek. Peculiarities of the Apc. which Hitzig mentions in addition to those listed by his predecessors are: the fixed sequence of the substantive and its genitive adjunct, the sequence of substantive—genitive substantive—adjective, the adjective being syntactically connected with the first substantive; furthermore the fact that participles when predicative do not precede the subject of the finite verb, and the construction of the conjunction ἵνα with the future indicative.

In 1896 W. Bousset took part in the 5th edition of Meyer's *Kritisch-exegetischer Kommentar über das Neue Testament* by rewriting the volume devoted to the Apc. We owe our data to the 5th edition⁵ of which chapter VII contains a systematic survey of

¹ Charles, *o.c.*, I, p. CXLIV-VI; Ewald's instances, however, are dubious, see *par.* 12.3.2. 3.2.

² *Versuch einer vollständigen Einleitung in die Offenbarung des Johannes*, Bonn, 1852, 2nd ed.

³ Göttingen, 1862, II, p. 36.

⁴ *Über Johannes Marcus und seine Schriften*, Zürich, 1843.

⁵ Göttingen, 1906.

grammar, but this survey does not claim any completeness with regard to the instances mentioned. For the first time there is here a list of peculiar case and verb forms, such as the acc. sg. χρυσῶν, the 2nd p. sg. pf. -κες, the 3rd p. pl. pf. -σαν, etc. An important syntactic observation is that a verb, if connected with two or more nominatives, is followed by these nominatives when it is a singular verb, but preceded by them when it is in the plural. Moreover, Bousset noticed the fact that the definite article is not repeated with the second of two successive substantives which refer both to the same person or thing.

1.2.4. *XXth Century*. T. C. Laughlin's dissertation of 1902 was the second written on our subject after Winer's disputation of 1825. It consists of only 23 pages, but contains condensed information. The solecisms discussed are divided into three groups: peculiar words, peculiar phrases and peculiar constructions. Although the author hardly exposes any more facts than Ewald and Bousset did, whose works he consulted, this little book has the merit of providing a valuable collection of Septuagint and Masoretic parallels. The final conclusion has been worded by Laughlin in his fourth thesis which runs: "*Viewing the evidence as a whole, the impression is strong that the author of the Apocalypse made use of the LXX and Hebrew idiom in a conscious effort to reproduce the manner and spirit of the ancient Prophets; it was not through ignorance of correct Greek usage*".¹

Of H. B. Swete's work only the second edition was at our disposal.² His most important contribution is undoubtedly the analysis of the Apc.-vocabulary, which is exposed in lists of the *hapax legomena*, either within the N.T. writings or within Greek literature as a whole, and a list of the most frequent words. In Swete's opinion the mutual divergences of the 4th Gospel and Apc. are due to "*personal character, rather than to relative familiarity with Greek*"; by these words he rejects the theory of the different stages in St. John's acquisition of Greek which had been advanced to account for the differences in style.³

Against Moulton Swete accepts the occurrence of Semitisms in

¹ Princeton, 1902. We thank Prof. Bruce Metzger for his kindness of sending us a photocopy of this dissertation.

² *The Apocalypse of St. John*, 1907, 2nd ed.

³ p. CLXXXIII.

the Apc.¹ He defends the unity of the work by pointing to words and phrases that recur throughout the whole and are not restricted to special parts of the book.

As we have said it was R. H. Charles who gave the most extensive exposition of the linguistic peculiarities and character of the Apc.² His well-known commentary contains a special chapter on grammar, in which he deals with morphology and syntax. In the morphological section only those facts are mentioned which constitute deviations from Classical Attic Greek. Charles discusses the different word classes and the categories of case, number and gender, but here some syntactical phenomena are also treated of, such as the position of the article with ordinal numerals. Moreover, there are special paragraphs on Hebraisms, text corruptions, the linguistic character of the interpolations and on word order. The commentary proper, however, includes sections on diction and idiom, in which word order is sometimes discussed more in detail than in his grammar. On the basis of this analysis, which is not complete as far as the verb and syntax in general are concerned, Charles distinguishes the parts composed by St. John from interpolations, and portions for which sources have been used.³ He compares, for instance, the idiom of XI 1-13 with that of the preceding chapters and concludes from its deviating word order that a source must have been used for the composition of this part.⁴

Charles' conclusions in general imply that the Semitisms in the Apc. are due to the Hebrew vernacular of St. John, and that the 4th Gospel cannot have been written by the same author. Similar opinions on the original or substrate language were held by Mieses and Turmel; ⁵ the former reached the conclusion that the author of the Apc. must be R. Yohanan b. Zakkai. Scott in his thesis on the original language of the book is more careful and avoids to make a

¹ p. CXXIV.

² *The Revelation of St. John*, The International Critical Commentary, Edinburgh, 1920.

³ *o.c.*, I p. 271-273.

⁴ In his earlier *Lectures on the Apocalypse*, The Schweich Lectures 1919, London, 1923, Charles applies in a similar way the poetical parallelism as a criterion: he considers as interpolations those words or passages that conflict with this Hebrew form of poetry which he thinks present all over the Apocalypse.

⁵ M. Mieses, *Hebräische Fragmente aus dem jüdischen Urtext der Apokalypse des heiligen Johannes*, Monatschr. f. Gesch. u. Wiss. des Judentums 74 (38), 1930, p. 345 ss. J. J. Turmel, *L'apocalypse*, Paris, 1938.

definite choice. According to him the Apc. was translated either from Hebrew or Aramaic into Greek.¹

The commentary by J. Allo² contains a valuable contribution: the author gives an enumeration of the tenses of the middle and participial categories that are actually used by St. John, thus leading the way to a more systematical method for describing the use of tenses in the Apc. Allo's method, however, will be fruitful only if it is not restricted to some of the categories of the verb, but will be applied to all of them.

Next we come across the name of Sievers, who employed his famous *Schallanalyse* also in analysing the Apc.³ On this much debated method, which in this case led to the distinction of no less than ten different voices, we will only make the remark, that based as it is on our modern way of pronouncing and reading the Greek language, of which the exact pronunciation is only approximately known and the intonation not at all, it can hardly be called scientific.

J. Schmid, the authority in the textual criticism of the Apc., has expounded the important view that the majority of the syntactical peculiarities in the Apc. should not so much be seen as structural characteristics but rather as *tendencies*. The title of the chapter in question: *Sprachgebrauch*, may illustrate this. It indicates the personal use that St. John has made of the possibilities offered by the language system of Koine-Greek (*cf.* De Saussure's *langue* and *parole*), and is therefore opposed to *Sprache*. In this way Schmid criticizes Charles' method of detecting interpolations on the assumption that the rare phenomena or alternative uses conflict with the author's use of language, and must therefore belong to the idiom of another person. If one adheres to Schmid's insight that both the frequent and the less frequent facts are covered by the language system, one cannot be so rash in calling the latter interpolations, because an author may waver in the *use* of that system.⁴

Last to be mentioned are two works which again try to solve the question of which of the languages must be held responsible for the Semitisms in the Apc.: Hebrew or Aramaic. C. C. Torrey⁵ is definitely

¹ R. B. Y. Scott, *The Original Language of the Apocalypse*, Toronto, 1928.

² *L'Apocalypse de St. Jean*, Paris, 1921.

³ *Die Johannesapokalypse klanglich untersucht und herausgegeben von Eduard Sievers*. Abh. philol.-hist. Klasse Sächs. Akad. Wiss. XXXVIII, 1, Leipzig, 1925.

⁴ *Studien zur Geschichte des Apokalypsetextes*, Munich, 1955-56.

⁵ C. C. Torrey, *The Apocalypse of John*, New Haven, 1958.

in favour of the latter: he points to all kinds of Aramaisms and also to mistranslations and palaeographical errors, which according to him have been caused by the Aramaic script of the original text. Such assumptions, of course, depend largely on what a scholar may think to be understandable in a given text. In other words, he exposes himself to the serious danger of considering too many passages uninterpretable in order to prove his thesis, and of giving up too soon the usual methods of analysis. In this way he will be moulding the text to his own tastes instead of studying it objectively.

A. Lancellotti is the latest defender of a Hebrew original thus sharing the views of Bengel, Turmel and Mieses.¹ His monography treats of the use of the verb and finds the solution for the rather frequent tense shifts which occur in the different visions, in the two tense system of Biblical Hebrew. Either of the Hebrew tenses could be rendered by more than one Greek verb tense and Lancellotti holds the opinion that St. John did not always do so correctly. As we shall expose later on in detail, we disapprove of some of his Hebrew-Greek equations and believe that the shifts as such may be explained otherwise. The main objection against endeavours like those of Torrey and Lancellotti is that they omit to point out somehow which of the differences between the Hebrew and Aramaic languages, which were so closely related, may still be visible in a Greek translation. As long as this is not done or cannot be done, we think it better not to differentiate, but to speak of Semitisms (*cf.* the views of Ewald and Scott).²

1.2.5. *Conclusions.* From this historical survey we learn that on the one hand there are hardly any subjects that have not been treated of somehow, one of the rare exceptions being the phonology of the Apc.-manuscripts, while on the other hand none of the subjects has been dealt with in an exhaustive way. The great shortcoming in the study of the morphology of the Apc. is the lack of a systematic description of the use of tenses, and as to syntax one could point out that a description of word order is likewise wanting. It stands to reason that not all that can be added is in itself of great importance, but a combination of all these seemingly trivial details may afford arguments in favour of some of the theses expressed in

¹ *Sintassi ebraica nel greco dell'Apocalisse; I. Uso delle forme verbali*; Collectio Assisiensis I, Assisi, 1964.

² I could not consult C. G. Ozanne, *The Language of the Apocalypse*, Tynd. H.B. XVI 1965, pp. 3-9.

the past with regard to authorship *etc.* Moreover, it is absolutely essential to the study of ancient bilingualism, “translation Greek”, Biblical Greek and related problems, that the descriptions of the use of language of the individual N.T. authors and LXX translators be as complete as possible.

CHAPTER TWO

TEXTUAL CRITICISM AND LINGUISTICS

2.1. *Introduction*

Anyone who wants to describe the (use of) language of a literary work or other document that has been handed down in several manuscripts, meets with the problem of textual criticism. Often that text edition which is known to be the best is chosen to serve as the basis for linguistic description. If the number of manuscripts is not too large the variant readings can be included in the description, but in the case of the Apc. this will be absolutely impossible: it is simply impracticable to make a description that accounts for some 230 manuscripts at the same time. Therefore a choice cannot be avoided.

Moreover, there is a second problem. The science of textual criticism itself uses more and more linguistic data in its method of determining which are the oldest variant readings. These data, however, cannot and may not be furnished by descriptions of the language as found in eclectic editions.¹ If we want to avoid circular reasoning we shall have to start from the use of language of the separate manuscripts themselves, these being the only facts at our disposal.² Studies of this kind have been undertaken by P. W. Hoogterp and J. D. Yoder respectively with regard to the Codex Bezae³ and the Codex Bezae,⁴ but their works covered several N.T. writings at the time. In such cases, we think, one would have to go still further in order to achieve methodological consistency and keep the N.T. writings apart in the description, not only because each author has stylistic peculiarities of his own, but also because the works of one and the same man have not been copied together

¹ Especially not when the frequency of current words like the articles, *καί*, the personal pronouns *etc.* has to be determined for a specific book. Their presence or absence in a given passage is very often the point of difference between the manuscripts.

² Cf. A. Thumb, *Die griechische Sprache im Zeitalter des Hellenismus*, Strasbourg, 1901, p. 12.

³ *Étude sur le Latin du Codex Bezae (k) des Évangiles*, Wageningen, 1930.

⁴ *The Language of the Greek Variants of Codex Bezae Cantabrigiensis*, diss. Princeton, 1958; cf. *Novum Testamentum* 3, 1959, p. 241-248.

right from the beginning. They circulated separately and had as it were a textual life of their own. That is why one and the same codex may be trustworthy with regard to, say the Gospel of St. Luke, but not as far as Acts is concerned. Even when the books had been combined into larger collections they were often corrected each from a different manuscript, sometimes the model was even changed during the collation of one and the same book.¹ Only when linguistic descriptions have been made of the *ms.* or *mss.* that are considered to be the more important witnesses (for instance on the ground of the highest number of *lectiones difficiliores* which they contain) one can proceed to make a guess at the use of language of the original. The result may be that many variant readings are to be discarded on the ground of this reconstruction, not only in the inferior *mss.*, but also in those serving as the basis of our description. It stands to reason that absolute certainty can never be attained.

Conclusion. Instead of describing the use of language of a text edition which is inevitably eclectic the linguist will have to choose the best *ms.* available and describe in the first place the idiom of that one alone.

2.2. *Choice of the Manuscript*

The great problem is now which Apocalypse-*ms.* we must choose. As is well known the oldest *ms.* is not necessarily the most trustworthy. The number of intermediate copies between a Xth century *cursive* and the autograph need not be larger than between the latter and a IVth century *uncial*.² It may have so happened that the cursive has been copied directly from a *ms.* X, while our uncial stems via several other *mss.* as intermediate stages from this same X. In such a case the latter is likely to be the less trustworthy, because each copy increases the number of variants, omissions, improvements, errors, etc.

If we are allowed to call a copy the "child" of the model or "mother" we could say that children contain usually more original readings than "great-great-grandchildren", in spite of the fact that the latter may have been "born" centuries before the former. As it

¹ H. J. Vogels, *Handbuch der neutestamentlichen Textkritik*, Bonn, 1955, 2nd ed., p. 20-21. L. Vaganay, *Initiation à la critique textuelle néotestamentaire*, Lyon, 1934, p. 60.

² Vogels, *o.c.*, p. 63 and 153. Vaganay, *o.c.*, p. 25.

is known of comparatively few manuscripts from which model they were actually copied,¹ it is one of the difficult tasks of textual criticism to shed as much light as possible on their interrelationships.

However, the *ms.*-reality is much more complex than we may have suggested by our comparison with lineal descent, precisely because "lineal descent" is rare: one copied and corrected at the same time, using several models simultaneously. Such a conflation of texts arose also when marginal notes were here and there inserted by a copyist because he thought them better than the wording of the text itself. But the most frequent cause of conflation was undoubtedly the copying of models that had been corrected by their successive possessors.

2.3. *Manuscripts and Language*

A second question that may be raised is, whether the older *mss.* are closer to the autograph than the younger *mss.*, as far as the language is concerned. A priori it may seem that the answer will be positive, as younger *mss.* are likely to contain more modern linguistic phenomena. Nevertheless some reserve is in place since a twofold evolution can be discerned in Greek *mss.* dating from the Christian era:²

2.3.1. *Phonology and Morphology.* First there is the gradual and very slow process of modernizing, perceptible for instance from the increasing number of phonetic spellings, especially during the first period of text transmission.³ Occasionally there are also morphological innovations, for instance at XXI 17 in cursive 2050 (dated 1107 A.D.) the numerals τεσσαρις (*cf.* Mod. Gk. τέσσερις) and σαραχοντα (*cf.* Mod. Gk. σαράντα). This process follows the changes of

¹ For a list of these *mss.* see: E. Nestle-E. v. Dobschütz, *Einführung in das griechische Neue Testament*, Göttingen, 1923, 4th ed., p. 119. The textual critic's ideal is studied by F. Lulofs in his dissertation *Verkenning door Varianten. De redacties van Het Uur U van M. Nijhoff stilistisch onderzocht*, The Hague, 1955 (Reconnoitring Variants. A stylistical Investigation of the Versions of Nijhoff's 'Zero Hour'). The successive versions of this poem have been made by the poet himself, and are absolutely fixed in their chronology.

² *Cf.* W. Michaelis, *Einleitung in das Neue Testament*, Berne, 1946, p. 381 and F. Blass-A. Debrunner, *Grammatik des neutestamentlichen Griechisch*, Göttingen, 1959, 10th ed., par. 3.

³ *Cf.* W. Michaelis, *Der Attizismus und das Neue Testament*, Z.N.W. 22, 1923, p. 121.

spoken language and will mostly have worked unintentionally, through slips of the pen, and incidentally.

Second there is the much stronger archaizing influence of Atticism. It was carried through on purpose but never consistently, and moreover, by different copyists to different degrees. We will illustrate this by displaying the distribution of the Hellenistic *ἔπεσα*, *ἔπεσας*, *etc.* by the side of the Classical and Atticistic *ἔπεσον*, *ἔπεσεσ, etc.*

Of the twelve aorists of *πίπτω* that probably occurred in the Apc., twelve are represented by *επεσα(ν)* in *ms.* A (the subj. *πεση* and 3rd p. sg. *επεσεν* are irrelevant and have not been included); **κ*** has ten times *επεσα(ν)*, once the imperative *πεσεται i.e. πεσετε* (VI 16), and one deviating reading; C and P 47 have *α*-forms only, but are incomplete (except: VI 16 C: *πεσεται i.e. πεσετε*); 046 has four *α*-forms and eight *ο/ε*-forms; many of the cursives have *ο/ε*-forms. Roughly speaking we can therefore say that the Classical forms reappear in *mss.* dating from the IXth century onward (except: *πεσεται* VI 16 **κ***, C).

Of some other verbs, too, there occur IInd aorists that have taken on the *α*-vocalism:

απηλθα X 9 A (-ον **κ**, C, 025, 046); *απηλθαν* XXI 1 A, **κ** (-ον 046, -εν 025) and XXI 4 A (-ον 025, -εν **κ**, 046);
εβαλαν XVIII 19 C (-ον A, **κ**, 046);
εξηλθαν XV 6 C (-ον A**, **κ**, 025, 046; -εν A*), but *εξηλθον* IX 3 all *mss.*;
εξελθατε XVIII 4 A, **κ** (-ετε 025; -θε C, 046);
ειπατω XXII 17 all *mss.*;
ιδα XVII 3 A and XVII 6 A (*ειδα κ*), by the side of more than 40 x (*ε*)ιδον;
 imperfect [*ει*]χαν IX 8 A (*ειχαν κ*; -ον 025, 046), but *ειχον* VI 9 all *mss.*

From this survey we learn that the older *mss.* have both types of aorist by each other's side, and that the one in -*α* tended to be replaced in the younger *mss.* 025 and 046 by the Atticistic -ον *etc.* This is quite contrary to the evolution of the spoken language: Modern Greek has only imperfects and aorists ending in -*α*. That Atticism worked incidentally in the manuscript tradition and did not expel all the newer forms at once, appears from the mixture of new and old shown above. Instances of *ἀπῆλθαν etc.* are already known from the Ptolemaic papyri, and may also have figured in the autograph of the Apc., but in view of their infrequent occurrence, especially

of εἶδα and εἶχα, these forms may be conceived of as modernizations dating from the period when Atticism was not yet strong.¹

2.3.2. *Syntax*. In the field of syntax an increasing normalization of anomalies can be perceived in the history of the Apc.-text transmission. We give only some of the instances.² The well known solecism at I 4 ἀπὸ ὃ ὦν (A, C, **Σ**, 025, and cursives) is corrected only in *mss.* from the IXth century and later, resp. to ἀπο θεου ο ων (046) or ἀπο του ο ων (cursives). Only later *mss.* have instead of την γυναικα Ιεζαβελ η λεγουσα (A, C, **Σ***) at II 20 either η λεγει (046, *etc.*) or την λεγουσαν (025, *etc.*, but also the 3rd corrector in **Σ**). Often even the uncials disagree, *e.g.* in XIV 19 εις την ληνον . . . τον μεγα(ν) (A, C, 025, 046) against την μεγαλην (**Σ**), which is grammatically correct, and in VII 9 εστωτες . . . περιβεβλημενους (A, **Σ** first hand) against -μενοι (**Σ** 3rd corr.). That an anomaly like I 5 ἀπὸ 'Ι(ησο)ῦ Χ(ριστο)ῦ ὁ μάρτυς remained uncorrected in the manuscript tradition is very curious, and proves that even all the cursives together may agree in preserving a *lectio difficilior*.

Someone might object that these solecisms may be due to text corruption, but the lapse of time seems too short for so many anomalies to arise in a text from which they were originally absent, if we compare the slow progress made by the favoured vogue of Atticism. They are already present in the IIIrd century Chester Beatty papyrus, and from about the same age comes Dionysius' testimony which would certainly not have been so critical had not he known that these anomalies belonged to the book of the Apc. as such and were not due to the inferior quality of the copy that he happened to possess. This restricts the period of vulgarization, if any, to some 150 years only, which is much too short, especially in an age when the trend was exactly the opposite.

Incidentally similar solecisms are found outside the Apc. in literary works,³ but it is the inscriptions and papyri that contain most of the parallels. These are often of foreign origin *i.e.* from countries where Greek was spoken by the side of an autochthonous

¹ *E.g.* S.B. 6011,9 (I B.C.). — The following second aorists have no variants in -α in the Apc.: ἀπέθανον, ἐγενόμην, ἔφαγον, ἔλαβον; moreover, the act.sg. imperatives, infinitives or participles of none of the second aorists are in -ον, -αι, -ας *etc.*

² Cf. Charles, *o.c.*, I, p. CLX-CLXIII.

³ Cf. L. Radermacher, *Neutestamentliche Grammatik*, Tübingen, 1925, pp. 86-87.

language that had no case categories *e.g.* Egyptian (Coptic) and Syriac, but instances from Greece proper are not wholly lacking.¹

The number, however, of anomalies in the Apc. is comparatively high and therefore it can hardly be assumed that the successive scribes would have introduced them, while the other N.T. books were not influenced in this respect. The only conclusion to be reached—although we achieve it by a calculus of probabilities—is that the syntactical anomalies must have figured in the original Apc. The gradual normalization of these unorthodox phenomena multiplied therefore the differences with the autographon, and consequently we consider the use of language as found in the older group of *mss.* (IIIrd-Vth cent.) as more similar to that of the author himself, than the idiom of the later ones dating from the IXth century onward. From the intermediate period no manuscripts of the Apc. are known yet.

2.4. *The Choice Made*

We shall have to choose then the object of our description from the older group but there is not much choice here, as it consists of only four *mss.* Two of them are incomplete: the Chester Beatty papyrus (P47: IIIrd cent.) and the Codex Ephraemi Rescriptus (C: Vth cent.); the others are the Codex Sinaiticus (Σ: IVth cent.) and the Codex Alexandrinus (IVth-Vth cent.).² As we have already remarked above, some uncials have normalized readings where others have syntactical anomalies. Because of the fact that the Alexandrinus has the least corrections-normalizations in this respect, Charles concluded it to be far superior to all other Apc.-*mss.* including the Sinaiticus.³ The present authority in the field of textual criticism with regard to the Apc., Schmid, agrees with him and holds the opinion that the Alexandrinus is "*schlechthin*" the best *ms.*

¹ For instance the confusion of the nominative and accusative cases, see the indexes in A. Audollent, *Defixionum Tabellae*, Paris, 1904.

² Of the remaining papyrus fragments P18, P24, P43, P. Oxy 1080, P. Oxy 848 none consists of more than eight verses. The latter two have not yet been included in the current enumeration of papyrus fragments if I am not greatly mistaken. (*cf.* Z.N.W., 42, 1949, p. 228 *ss.*).

³ *o.c.*, I p. CLX-CLXVI. According to R. V. G. Tasker, *The Chester Beatty Papyrus of the Apocalypse of John*, Journ. Theol. Stud. 50, 1949, p. 60 *ss.* the value of P47 for the reconstruction of the original text is less great than that of A and C (p. 67). *Cf.* M. J. Lagrange, *Les Papyrus Chester Beatty*, Revue Bibl. 43, 1934, p. 490 (on the Apc.).

that we possess at the present time.¹ The inferiority, on the other hand, of the Sinaiticus as far as the Apc. is concerned, has been demonstrated by Weiss.²

2.5. *The Codex Alexandrinus*

This manuscript, which was accessible to us through the autotypical edition of Thompson³ and the collation done by Woide and Cowper,⁴ is to be dated between 373 and c. 458 A.D. In the former year the churchfather Athanasius deceased; his connection with our codex lies in the fact that the *Epistula ad Marcellinum de Interpretatione Psalmorum* which he composed, has been copied and inserted in the Alexandrinus before the Book of Psalms. When exactly this Letter was written is unknown, but in all probability it already circulated when Athanasius was still alive.⁵ We feel therefore free to conclude that at least from the year of his death onward the Letter may have been inserted into the codex.

The latter year, 458 A.D., is the latest date to which one might assign Euthalius' edition of St. Paul's letters, in which the so-called Euthalian division into chapters was carried through. This division was generally accepted soon after its introduction, but it is still absent from the Corpus Paulinum in *ms. A*. The earliest date of this edition is 396 A.D., and it is conceivable that Euthalius may have worked even before this year: this would confine the date of our codex to the last quarter of the IVth century. The fact that it contains Barnabas, the Clementine Epistles and Hermas points to about the same period, namely to a time when the canon of the N.T. was still unstable. This leads us to the Councils of Laodicea c. 365 A.D. and of Carthage which was held in 397: during both of these sessions the matter of the canon was still under discussion.⁶ If we assume

¹ o.c., II p. 141: . . . "den überragenden Wert von A als der schlechthin besten Apc.-Hs." Cf. J. Schmid, *Neue griechische Apokalypsehandschriften*, Z.N.W. 59, 1968, p. 251.

² *Die Johannes-Apokalypse: Textkritische Untersuchungen und Textherstellung*, Leipsic, 1891.

³ *Facsimile of the Codex Alexandrinus. IV. New Testament and Clementine Epistles*, London, 1879.

⁴ C. G. Woide-B. H. Cowper, *Codex Alexandrinus*, H KAINH ΔΙΑΘΗΚΗ, London, 1860.

⁵ F. H. A. Scrivener-E. Miller, *A Plain Introduction to the Criticism of the New Testament*, London, 1894, 4th ed., I p. 102. F. G. Kenyon, *Handbook to the Textual Criticism of the New Testament*, London 1912, p. 75.

⁶ Scrivener-Miller, o.c. I, pp. 53, 63-64, 102; Vogels, o.c., pp. 25, 52.—For the Euthalian question see: O. Bardenhewer, *Geschichte der altkirchlichen*

now in conclusion that the Codex Alexandrinus has been written around the turn of the IVth to the Vth century, the possible error cannot be great.

As to the origin of the manuscript the following facts are known.

That it has been in Alexandria for ages appears from two notes in it, one Arabic and one Latin, which say that it was offered to the cella of the patriarch of Alexandria; according to the Latin note this happened in 1098 A.D. The Arabic note has been written by a certain Athanasius, who may be identical with the patriarch of that name who died in 1308. In all likelihood the codex was brought to London in 1621 by Cyrillus Lucaris, the last patriarch of Alexandria, who gave it as a present to king Charles I in 1628.

As to the paleography of the *ms.*, Scrivener assumed in the N.T. part of codex A only one handwriting,¹ Woide and Cowper distinguished two hands,² and Kenyon no less than four, of which one would have written exclusively the Apocalypse.³ The subscribed titles of the different books are later additions and contain according to Kenyon typical Coptic forms of α and μ .⁴ The interpunction as far as present is authentical;⁵ original accents, however, are found only in the O.T. section, in the book of Genesis. In the Apc., moreover, there are some accents in XXI 14 and XXII 18 where corrections have been made by a cursive hand. These and other emendations do not belong in the strict sense to the use of language of the Apocalypse in the Alexandrinus (abbr.: Apc.-A), but as far as we can see their inclusion in the linguistic description would be of no consequence; a list of them has been drawn up by Woide-Cowper.⁶

2.6. *The Method of Quoting*

In the present study all Apc.-quotations will be made from the codex Alexandrinus, unless other *mss.* are explicitly mentioned.

Literatur, Darmstadt, 1962, III, pp. 283-5, and B. Kraft's *art.* on *Euthalios* in the *Lexikon für Theologie und Kirche*, Freiburg, 1959, III, 1206/7.

¹ *o.c.*, I, p. 101.

² *o.c.*, p. 5.

³ F. C. Kenyon, *Handbook to the Textual Criticism of the New Testament*, London, 1912, p. 74.

⁴ *o.c.*, p. 76.

⁵ Scrivener-Miller, *o.c.*, I, p. 100. According to these authors only in the opening lines up to ἀβύσσου, but the facsimile edition of H. Herveii Baber (*Vetus Testamentum Graecum e Codice MS. Alexandrino*, I, London, 1816) shows accentuation in chapters I, II 1-3, III 14-23 etc.

⁶ *o.c.*, p. XI.

This implies that we shall retain the orthography and indicate the lacunas found in this *ms.*, as well as the additional words and letters, and quote *e.g.* ἴδον, οἷταινες, [Ἐπο]κάλυψις, Ἰ{ε}ρ{ε}ις *i.e.* Ἰρις, *etc.* Initial ι̅ and υ̅ will be replaced by ι̅, ι̅ and υ̅, while the final stroke which replaces in the *ms.* the ν at the end of a line, will be represented by ν. The *nomina sacra* used in A, such as θς, κς, πρς, πνικως *etc.* will be written θ(εό)ς, κ(ύριο)ς, π(ατ)ρ(ό)ς, πν(ευματ)ικῶς.

CHAPTER THREE

ORTHOGRAPHY

3.1. *The sequence: Orthography—Phonology—Morphology—Syntax*

Traditional descriptions of Greek usually start with discussing phonology, next morphology, and last of all syntax. Some instances out of many are the grammars by Schwyzer, Blass-Debrunner and Mayser.¹ This order of discussion may ultimately reflect the historical growth of Classical grammar. In its oldest stage as the name still shows, grammar or the γραμματική (sc. τέχνη) embodied only the instruction of writing and reading; the study of morphology and syntax became attached to it at later times.² This sequence has the unmistakable advantage that it proceeds from the smallest elements to the greater, from the least complex to more complex structures.

This method, however, is not a matter of course. It has been criticized *a.o.* by Hjelmslev, who is in favour of the reversed order in linguistic description.³ According to him the linguistic analysis should start from the original datum, the immediately given object, which is always a text, but many others consider the sentence as the first object of linguistic study. From text or sentence the analysis proceeds then to the smaller elements and so forth, until those entities have been reached that are not further analysable.⁴

With both methods it appears that one sooner or later comes across specific elements that cannot be completely described without breaking the order. Syntax in Hjelmslev's order cannot be completely dealt with unless one discusses the word, a unit of which the categories are to be described in a later stage. The same holds good of morphology which one cannot describe without anticipating phonology. Moreover, there are points of contact between non-successive layers: such phenomena as sandhi, crasis and the like connect syntax with phonology. The traditional sequence of dis-

¹ *Griechische Grammatik*, Munich, 1953; *Grammatik des neutestamentlichen Griechisch*, Göttingen, 1959 (10th ed.); *Grammatik der griechischen Papyri aus der Ptolemäerzeit*, vol. I, Leipsic, 1906, vol. II, Berlin, 1926-1934.

² J. E. Sandys, *A History of Classical Scholarship*, Cambridge, 1921, I, p. 90-91.

³ L. Hjelmslev, *Prolegomena to a Theory of Language*, Madison, 1961, p. 12.

⁴ *o.c.*, p. 30.

cussion is no exception to this. Whichever startingpoint one may choose, one always makes use—though not to a great extent—of facts and notions of which the description is still to follow. The linguist cannot avoid working on several levels at the time, evidently because in the reality of language these levels are simultaneous, not successive: each wordform consists *a.o.* of phonemes, takes part in some pattern of intonation, has relationships with other words if it is not the only word of the sentence, and belongs very often to some word category.

From the descriptional point of view Hjelmslev's method does not therefore offer any great advantages, and in connection with the description of Koine-Greek there is a definite reason for preferring the traditional sequence: the usual orthography gives an entirely wrong impression of how the language really was, and besides this there are many orthographical variants in *Apc.-A*. If the discussion of these questions will be postponed we shall have to interrupt the other descriptions time and again by orthographical-phonological remarks. For practical reasons it is desirable to make all such remarks together at the beginning, and in that case it is only natural to proceed next to the discussion of phonology proper.

Above we said that we cannot deal with syntax in this volume. Nevertheless we will state here why in our opinion it is also preferable to treat of the morphology of Koine-Greek before its syntax. This order offers the great advantage that the words of which the mutual sequence and relations will be described in syntax can then be distinguished from one another according to the morphological categories to which they belong. This is an advantage which we should not deny ourselves beforehand, because extra difficulties are involved in the syntactical description of those languages that have few morphological categories or none at all. In such cases one has to meet the arduous task of establishing classes of sequence and combinability of which the members cannot be referred to in terms of form.

3.2. *Orthographical Variants in the Apc.-A.*

By orthographical variants we understand: the different ways in which identical words are spelled in *Apc.-A*, as well as the instances of spelling which deviate from the traditional orthography of Greek.

Some cases of the former kind are:

I 19 ἴδες *vs.* I 20 εἶδες; IV 1 ἴδον *vs.* I 12 εἶδον; XI 5 δι *vs.* I 1 δει; XVIII 2 μεμεισημενου *vs.* XVIII 2 μεμεισημενου; XVI 10 ἐξεχαιν *vs.*

XVI 2 ἐξεχεν; XVII 12 οἰτεινες *vs.* I 7 οἰτινες; XIX 9 λεγι *vs.* XXII 20 λεγει; (XI 12 θεωρησαν *vs.* XI 11 θεωρουντας; VIII 1 ειμιωρον *vs.* XII 14 ημισυ).

To the latter category belong *a.o.*:

II 5 κεινησω (= κινήσω); II 28 προῖνον (= πρωῒνόν); XI 5 στωματος (corrected to στομ.); XII 12 ευφραινεσθαι (= -σθε); XXI 20 βηριλλος (= βήρυλλος).

These variants can be distinguished into conditioned variants which occur under special circumstances, for instance in the neighbourhood of a specific letter (sound), and variants which do not seem to depend on such conditions. We shall discuss the latter kind first because they can give us a clue—provided they do not occur too incidentally—as to which letters can be considered as indications of one and the same phoneme by the time when the Apc.-A was written down.

3.2.1. *Unconditioned Variants*

3.2.1.1. $\epsilon \sim \alpha\iota$. Confusion of ϵ and $\alpha\iota$ occurs in III 5 περιβαλειτε instead of -ται, and conversely in XVI 10 ἐξεχαιν instead of -εν. The diaeresis sign served to distinguish the real sequence of spoken α and ι from the digraph $\alpha\iota$ *e.g.* IX 11 εβραῖστι. The total number of confusions $\epsilon/\alpha\iota$ is 10.

3.2.1.2 $\epsilon\iota \sim \iota$. Most frequent (*c.* 105 x) is the confusion of the digraph $\epsilon\iota$ and ι , which works in two directions. Instead of the traditionally required short or long ι one finds $\epsilon\iota$ *e.g.* in XVII 12 οἰτεινες (originally short) and in II 5 κεινησω (originally long). Conversely we find also ι for the traditional $\epsilon\iota$ *e.g.* in XIX 9 λεγι. Together these facts indicate that both spellings represented only one phoneme. The real sequence of spoken ϵ and ι is written $\epsilon\iota$ *e.g.* in III 17 ελεῖνος (for ἐλεεινός). That the traditional long and short ι can both be written $\epsilon\iota$ constitutes together with facts to be discussed sub 3.2.1.4 an indication of the disappearance of the distinctive differences in quantity between vowels.

3.2.1.3. $\epsilon\iota \sim \eta$, $\iota \sim \eta$. Of each of these confusions we have only one instance: VIII 1 ειμιωρον for ἡμίωρον (*cf.* XII 14 ημισυ) and XVIII 12 σιρικου (for σιρικοῦ). Both are doubtful proofs for the equation $\epsilon\iota/\iota - \eta$, because ἡμι- had a variant ἰμι- long before the frequent confusions of ι and η occurred, and the same holds good of σιρικου; Schwyzer considers both as instances of assimilation to the

second ι,¹ in which case they would have to be reckoned with the conditioned variants. It is likewise doubtful whether XI 5 θελει instead of θέλη is a genuine case of phonetical orthography, or an error in the use of tenses (see *par.* II.2.2.4).

3.2.1.4. ο ∼ ω. The spelling of προῖνον (II 28) for πρωῖνόν, ἐθεορῆσαν (XI 12) for ἐθεώρησαν, and το αναβαινων (XI 7) for τὸ ἀναβαῖνον makes it clear that ο and ω are only orthographical variants and indicate one phoneme, the former difference in quantity being no longer distinctive. The total number of these variations in the Apc.-A is eight.

3.2.1.5. ι ∼ υ. With the exception of the old variant βιβλιον (I 11, *etc.*) which had arisen from βυβλίον by assimilation of the υ, and occurred already in the earlier Attic inscriptions,² the word βηριλλος (XXI 20) is the only instance of ι instead of υ. It is possible that in this case, too, [ü] has been assimilated to (preceding) [i] η: βηριλλος [b/vírilos] < βήρυλλος [b/vírulos].

3.2.1.6. υ ∼ ου. The word κολλουριον (III 18:A) occurs elsewhere as κολλυριον (III 18:K, C), a derivation from κολλύρα (*cf.* Isidorus, *Etym.* IV 9, 10: *collyria*). The causes of this variation are obscure; a similar case may be XI 11 ημισου for ἥμισυ (*cf.* XI, 9, XII 14), unless we have to do here with a blend of ἥμισυ and the genitive ἡμίσεως, which were both used as indeclinables.

It is a well-known fact that in several of the Greek dialects the letter υ indicated the phoneme [u], while [ü] was absent from them.³ The Hellenistic instances of the spelling ου where one would expect υ may in part be explained from these dialectal differences, but in Egypt where this variation is incidental only, it is more likely that they represent a real substitution of [ü], which did not occur in Egyptian as a phoneme, by the most similar sound, which was [u]. That this substitution occurred in κολλουριον and not in words like ὑμεῖς, ὑπὸ *etc.* may be due to the fact that the former had been taken over by the Egyptians as a loan word before 400 A.D.: in the Bohairic version of the Apc. we find κολλουτριον, and even with

¹ *o.c.*, I p. 256. Instances are: ἱμῖ τέλεστα (P. Leid. U. 3, 8: II B.C.), ἱμῖ χουν (P. Par. 43, 3: 154 B.C.) and σιρικάριος from σιρικάριος (*cf.* also in Latin the variation between "*sericaria*" (Inscr. Orelli 2955) and "*siricaria*" (C.I.L. VI 9892).

² Liddell-Scott *s.v.* βυβλίον.

³ C. D. Buck, *The Greek Dialects*, Chicago, 1955, p. 28.

assimilation of the first vowel **κοτλλοτριον**; in the Sahidic version figures an originally Egyptian word.¹

3.2.1.7. *Spiritus Asper*. In the Apc.-A the spiritus asper is written as a dot on the initial vowel letter or as a short horizontal stroke on it.² It is not written in a consistent way. On the articles **ὁ, ἡ, οἱ, αἱ** it has been placed 44 times, which means that it is omitted c. 415 times; moreover, it is found with three relative pronouns, three times with **ἡμῶν** (omitted 8 times), five times with **ἡμέρα** (omitted 14 times), perhaps once with **ἐπτά** in I 20 (omitted c. 40 times), once with **ἦκω** (omitted 5 times), and also on some words with initial **ι** or **υ** like **ἴνα, ἵππος, ὕδατα**. In these cases, however, it may be suspected whether there is really a spiritus mark; initial **ι** and **υ** were always written with diaeresis: **ι̇, υ̇**, and the two dots could easily run into a stroke resembling a spiritus mark.

In some words the spiritus mark is written where it does not belong from the traditional point of view: on **ἡκουσα** five times (24 times omitted) and two times on **ἡνοίξεν** (15 times omitted); moreover, we find in XII 11 **ουχ̇: ηγαπησαν** and in XX 6 **ουχ̇ εχει** (but cf. IX 4 **ουκ̇ εχουσι**). From these instances one gets the impression that the consonant indicated by the spiritus mark *i.e.* phonetically [h-] was no longer pronounced; apart from the context there was then no longer any opposition between *e.g.* **οὔς** and **οὔς̇**. It is however, equally possible that we are in a period of transition in which there was much confusion: [h-] was then either pronounced or not and, as often happens in such situations, the result is great uncertainty and many mistakes like **ε̇χει** (in XX 6 **ουχ̇ εχει**).³ The Greek loan words in Coptic, too, betray this uncertainty and have often initial **ϣ[h]** where it is etymologically superfluous: **ϣεθος, ϣελπις, ϣεικων** and others. Blass-Debrunner and Schwyzer explain some of these cases as analogical formations *e.g.* **εφιδειν**

¹ For the variation **υ-ου** cf. a.o. A. Thumb, *Die griechische Sprache im Zeitalter des Hellenismus*, Strasbourg, 1901, p. 193, and by the same: *Die griechischen Lehnwörter im Armenischen*, Byz. Zschr. IX, 1900, p. 397-398; Schwyzer, *o.c.*, I, p. 183. For Coptic: G. Steindorff, *Koptische Grammatik*, Berlin, 1930 (2nd ed.), p. 8. Coptic has the ypsilon only in Greek loan words and in the digraphs **ϣϣ, Δϣ, Εϣ**; cf. A. Böhlig, *Die griechischen Lehnwörter im sahidischen u. bohairischen N.T.*, Munich, 1958 (2nd ed.), pp. 104 and 205.

² To be distinguished from the dots that are placed high between the words and have quite different functions (see *par.* 3.6).

³ Cf. L. Radermacher, *Psilose in der Koine*, Anzeiger Oesterr. Ak. Wiss. Phil. hist. Kl. 88, 1951, pp. 325-327.

from the aspirated ὀρῶ *etc.*; ἔτος and ἴσος, however, are considered as “*Hyperattizismen*”.¹ For XX 6 οὐχ ἐχει this could mean that it owes its spiritus to the aspirated future tenses as found in *e.g.* XXII 5 οὐχ ἔξουσιν, but XII 11 οὐχ ἡγάπησαν cannot be so explained.

In any case we think it doubtful whether the spiritus asper still represented a separate phoneme *c.* 400 A.D.: it was either a purely orthographical antiquity, or it corresponded with an incidentally pronounced initial [h-]. In the latter case there was no semantic opposition between *e.g.* [híp(p)os] and [íp(p)os], apart from the fact that the former may have been archaic or pedant. One may describe then [h-] plus vowel as a free variant of the different initial vowels for the transitional period which preceded the total disappearance of [h-] (*cf. par.* 3.2.1.8).

3.2.1.8. θ, φ, χ. In the Apc.-A χ is written once for κ, in XIV 18 ἡχμασαν, if we except οὐχ in XII 11 and XX 6, which is of a different nature (see *par.* 3.2.1.7). For Classical Attic the sounds indicated by θ, φ, χ are phonetically described by contemporary authors as consisting of resp. τ, π, κ plus what must have been similar to the spiritus asper *i.e.* [h]. The phonetic values were then [th], [ph], [kh], and this is also borne out by such orthographies as τh, πh, κh. It is a well known fact that the pronunciation of the phonemes [th], [ph], [kh] changed in the IVth century or later to resp. [θ, f, χ], undoubtedly via the intermediate stages [tθ, pf, kχ], because the initial part of Egyptian names like T(3)-s3(t)-n(t)-imn “the daughter of Amon” could be written in Greek as Θεν- or as Τσεν-; compare also Italian *zio* [tsio] “uncle”, which has developed from the Greek loan word θεῖος [thíos]. This phonetic change was not yet a fact by the time when the Egyptians took over the Greek alphabet. They retained the Demotic signs for [f] and [χ], but nevertheless they borrowed θ, φ, χ, though mainly in loan words. In originally Egyptian words in the Sahidic dialect of Coptic these letters are found only as variants of πϩ- [ph] and τϩ-[th], initial clusters that arise in this language when the definite article, masc. π- fem. τ-, the privative prefix ατ- or the causative prefix τ- are added to words with initial ϩ- [h] *e.g.* πϩωḅ or φωḅ both [pho:b] “the matter”. As in Sahidic orthography the sequences τϩ, πϩ, κϩ are hardly found elsewhere²

¹ *O.c.*, *par.* 14 and *o.c.*, I, p. 305-306.

² Except when accompanied by the supralinear stroke which indicated a reduced vowel of some kind. In Bohairic orthography θ, φ and χ were

the Greek θ, φ, χ represented combinations that were comparatively rare in unprefixes and non-compound words, and this may be the reason why they are so frequently confused in the Greek papyri found in Egypt with τ, π, κ.¹ Our only instance of this confusion can therefore be explained as an incidental slip of the scribe of the Apc.-A, or in the *ms.* from which A has been copied (*cf.* Apc. X 3 *μυχεται* for *μυαται* in P 47).

The letters θ, φ, χ had another function as well: they served also as a kind of ligatures indicating sequences of τ, π, κ and actual spiritus asper in compounds like *μεθίημι*, *ἀφίημι*, or in the sentence between juxtaposed words *e.g.* *ἀφ' ἑππου*, *οὐχ ἑππος*. When to these latter cases a spiritus mark is added, as our modern orthography always does, we should be aware of the fact that [h-] is written twice.

By the time when the pronunciation of initial [h-] became unsettled we see that *οὐχ*, *ἐφ' etc.* occur also before words which had originally no [h-], in the Apc.-A: XII 11 *ουχ· ηγαπησαν* and XX 6 *ουχ εχει*. As soon as the spiritus has wholly disappeared one would expect that neither *ἀφ'*, *ἐφ'*, *ὕφ' etc.* including their misuse were found any longer, but that is not so: a number of these incorrect combinations persisted and went through subsequent phonetic changes *e.g.* Modern Greek *φέτος* [fétos] 'per year' stems from the incorrect *ἐφ' ἔτος* for *ἐπ' ἔτος*.

On the other hand we think that a tendency is perceptible in Apc.-A to avoid the apocopate prepositions *ἀπ'*, *ἀφ' etc.* altogether, except before personal and relative pronouns. With these few but frequent words it was evidently no problem for a writer to memorize where *e.g.* *ἀπ'* or *ἀφ'* had to be used. In Apc.-A there occur 21 of these apocopate prepositions, all of them before pronouns except IV 8 *ἐν καθ' ἐν*; before other words with initial vowel or [h-] we find the full preposition forms, all together six times *e.g.* VII 2 *ἀπὸ ἀνατολῶν ἡλίου* and likewise VI 13, XVI 12, XXI 10, 13, (21 A: ἵνα); I 4 *ἀπο ὁ ὦν* would also come under this heading but it is so unusual a case that we shall keep it wholly apart (*see par.* 6.2.4.2.1).

3.2.1.9 *Ny Ephelkystikon and Sigma Mobile* This *ny* is absent from only seven of the words in question in the Apc.-A: VII 10 *κραζουσι*, IX 4 *εχουσι*, X 5 *ηρε*, XVII 16 *μεισησουσι*, XIX 17, XXI 8 *πασι*, and XXI 8 *φονευσι*. Each of these words is followed in the

more frequently used, see G. Steindorff, *Lehrbuch der koptischen Grammatik*, Chicago 1951, p. 27.

¹ Schwyzer, *o.c.*, I, p. 204.

context by a word with initial consonant. Everywhere else in the Apc.-A the words in question (dat.pl. in -σιν, 3rd p. pl. in -σιν, 3rd p. sg. imperf. and aorist in -εν) end in -ν; the numeral εἴκοσι, however, is always without it.

These facts are in line with the evolution of Koine-Greek: in later times it became more and more the rule to use the forms with -ν in any position ¹ and the old distribution of *e.g.* πᾶσιν *vs.* πᾶσι, if there was ever any consistency here, ² was now given up.

As to the instances without -ν, the possibility cannot be ruled out that they represent the loss of ν as it is known from other positions and categories *e.g.* μεγάλη τε for μέγαν τε, *cf.* ολυμπιόδωρος for Ὀλυμπιόδωρος.³ They might be therefore incidental cases where the scribe literally followed his actual speech, but besides these the Apc.-A does not contain any loss of final -ν. The reverse phenomenon, the addition of the so called "irrational -ν" is likewise absent *i.e.* the addition of -ν where it does not belong from the historical point of view, as in the 1st p. sg. προσέχω for προσέχω.⁴

A paleographic peculiarity is the replacement of the ν by a horizontal stroke at the end of the line; it occurs 156 times against 196 cases where ν at the end of the line has been retained, 36 times ν is written although the line has not been wholly filled up, and in XVII 8 the horizontal stroke is found in the middle of the line before other words.

Mobile -ς. ἄχρη: 10x before cons.; before οὗ II 25 8, C (A εως; 025, 046 αχρης); ἄχρης also VII 3 A (8 before cons.; 046 before οὗ). οὐτω: before cons. XVI 18; οὐτως: 4x before vowel, at XI 5 before cons., where A omits the word, and only some cursives have οὐτω.

3.2.1.10. *Iota Adscript*. The codex A of the New Testament does not contain any instances of iota adscript.⁵ In Classical Attic this letter—in αἰ, ηἰ and ωἰ—indicated the sound [j] after long vowels. That it disappeared from the spoken language in the Hellenistic

¹ Blass-Debrunner, *o.c.*, par. 20: "Die massgebenden Hdschr. des N.T. setzen es fast immer, mag nun Konsonant oder Vokal folgen oder das Wort am Satzende stehen." Cf. K. Meisterhans-E. Schwyzer, *Grammatik der attischen Inschriften*, Berlin, 1900, p. 114, and A. Scherer, *Zur Laut- und Formenlehre der milesischen Inschriften*, Munich, 1934, p. 56.

² Schwyzer, *o.c.*, I, p. 405.

³ Schwyzer, *o.c.*, I, p. 213-214; cf. Mayser, *o.c.*, I-1, p. 190-191.

⁴ P. Par. 45, 7: 153 B.C.

⁵ C. G. Woide-B. H. Cowper, *Codex Alexandrinus* Η ΚΑΙΝΗ ΔΙΑΘΗΚΗ, London, 1860, p. X.

period appears from the testimonies of Dionysius Thrax and Strabo;¹ it is also borne out by the occurrence of the so-called irrational iota which was added to α , η , ω in cases where it had never figured before *e.g.* in $\epsilon\gamma\omega\iota$ for $\acute{\epsilon}\gamma\acute{\omega}$.

3.2.1.11. $\zeta \sim \sigma\tau/\sigma\theta$? The only variation of this kind is found in I 14 (A) $\mu\alpha\zeta\omicron\iota\varsigma$ where *mss.* C, 025, 046, 250, and others have $\mu\alpha\sigma\omicron\iota\varsigma$, and *mss.* K, 104, 205, 209, *etc.* have $\mu\alpha\sigma\theta\omicron\iota\varsigma$. No conclusion may be drawn from it with regard to the phonetic value of ζ around 400 A.D. because outside of the Apc. this variation is likewise restricted to the words mentioned. From the etymological point of view $\mu\alpha\zeta\acute{\omicron}\varsigma$ which is well-known from Homer and Herodotus, $\mu\alpha\sigma\acute{\omicron}\varsigma$ and $\mu\alpha\sigma\theta\acute{\omicron}\varsigma$ seem to be different formations. According to some of the ancient grammarians there would have been a difference in meaning between $\mu\alpha\zeta\acute{\omicron}\varsigma$ "man's breast" and $\mu\alpha\sigma\acute{\omicron}\varsigma$ "woman's breast", which would fit the context of I 14, but elsewhere the distinction is not maintained.²

3.2.1.12. $\pi \sim \beta$. In XXI 24 $\pi\epsilon\rho\iota\beta\alpha\tau\eta\sigma\omicron\upsilon\sigma\iota\nu$ we have the only instance of the variation $\pi \sim \beta$, which along with that of τ and δ , κ and γ , seems to have been typical of Egypt if we are to judge from the Greek loan-words in the Coptic New Testament; it occurred, however, also in the Greek inscriptions in Phrygia.³

3.2.1.13. *Geminates*. In I 11 (A) occurs the haplography $\epsilon\iota\varsigma \mu\upsilon\rho\nu\alpha\nu$ for $\epsilon\iota\varsigma \Sigma\mu\acute{\omicron}\rho\nu\alpha\nu$. It may represent [ismürnan] or more likely [izmürnan], because $\sigma\mu$ and $\zeta\mu$ often vary, which suggests the pronunciation [zm]. The spelling $\epsilon\iota\varsigma \mu\upsilon\rho\nu\alpha\nu$ therefore tells us nothing about the pronunciation of geminate consonants, but haplographic instances from elsewhere make it probable that the spoken language did not distinguish between single and geminate consonants *e.g.* $\gamma\lambda\omega\sigma\alpha\nu$ for $\gamma\lambda\acute{\omega}\sigma\sigma\alpha\nu$ (Miletus, I A.D.), $\epsilon\iota\varsigma \tau\eta\lambda\eta\nu$ for $\epsilon\iota\varsigma \sigma\tau\acute{\eta}\lambda\eta\nu$ (Miletus, 282 B.C.)⁴ and also Apc. XIII 18 (P47) $\omicron \epsilon\chi\omega\nu \omicron\upsilon\nu$ for $\acute{\omicron}$

¹ Mayser, *o.c.*, I-1, p. 119-137: in Egypt after η and ω since III B.C., after originally long α since II B.C. Cf. Schwyzer, *o.c.*, I, p. 202.

² Cf. Liddell-Scott *s.v.* $\mu\alpha\sigma\acute{\omicron}\varsigma$. For $\mu\alpha\sigma\theta\acute{\omicron}\varsigma$ see: Schwyzer, *o.c.*, I, p. 510 and Blass-Debrunner, *o.c.*, par. 34. 5.

³ A. Böhlig, *Die griechischen Lehnwörter im sahidischen und bohairischen Neuen Testament*, Munich, 1958, p. 106-109, and D. E. Evans, *Notes on the Consonants in the Greek of Asia Minor*, Class. Quart. XII, 1918, p. 165. Cf. Schwyzer, *o.c.*, I, p. 160.

⁴ B. Bondesson, *De sonis et formis titulorum Milesiorum Didymaeorumque*, Lund, 1936, p. 110-111. For the problem as a whole see Schwyzer, *o.c.*, I, p. 230-231.

ἔχων νοῦν. The reverse is found in Apc. XIII 13 (C) καταβαίνων for καταβαίνειν, and XVI 10 (P47) εμασσώντο for ἐμασῶντο (X, A, C).

3.2.2. *Conditioned Variants.* As we have said these variants occur only under specific circumstances either of a phonological or morphological character. The most important is:

3.2.2.1. *The variation* $\nu \sim \mu \sim \gamma$. As is well-known ν and μ vary before β , π , ϕ , whereas ν and γ vary before γ [g], κ , χ . In the Apc.-A we find for instance συγκαίνωνος (I 9) by the side of συνκαίνωνησεται (XVIII 4), both pronounced [sün-].

About the value [ɲ] of γ a statement of Varro has been preserved which runs: "*Ut Ion scribit, quinta vicesima est littera quam vocant agma, cuius forma nulla est et vox communis est Graecis et Latinis, ut aggulus, aggens, agguila, iggerunt. In eiusmodi Graeci et Accius noster bina g scribunt, alii n et g, quod in hoc veritatem videre facile non est. Similiter ageps, agcora*".¹ This γ [ɲ], just as ν , was sometimes omitted before consonants, in the Apc.-A in XIII 8 αἰγεγραπται and XVII 8 εγεγραπται both [εgégrapte] for ἐγγέγραπται [ɛɲgégrapte]; this very instance is also found in a papyrus dated 133 B.C.² Much older cases of the same kind are γεινεσθαι (I 19, etc.) and (αα-)γινωσκων (I 3) which have both arisen from γιν- of which the second γ had also the value [ɲ]: [gin-] was simplified to [gin-]. Of these two verbs the forms mentioned are usual in the Hellenistic period. That γ had also the value [ɲ] before μ may be concluded from the name *agma* i.e. ἄγμα in the above quotation from Varro.³

Other conditioned variants are:

3.2.2.2. $\kappa \sim \gamma$. These letters vary before γ [g], β , δ , and ν . The only instance in the Apc.-A is XXII 8 διγνυοντος [dign-] for δεικνύοντος. The phonetic ambivalence of the letter γ resulted in ambiguities in only one position, namely before another γ : the sequence $\gamma\gamma$ indicated either [ɲg] or [g] only. The latter had arisen from [kg] via [gg] in such words as ἐγγραφέτω, which according to the context cannot be

¹ Varro *ap.* Priscianum 2, 30, 15-21 (in E. H. Sturtevant, *The Pronunciation of Greek and Latin*, Philadelphia 1940, 2nd ed., p. 155.

² P. Lond. II, p. 6, col. 2, 5.

³ The word is probably onomatopoetic, see L. J. D. Richardson, 'Agma', *a forgotten Greek Letter*, *Hermathena* LVIII 1941, pp. 57-69. R. L. Ward holds the opinion that $\gamma\mu$ was [ɲm], but that $\gamma\nu$ was [gn] in: *Afterthoughts on g as η in Latin and Greek*, *Language* XX 1944, pp. 73-77.— N.B. The combination $\epsilon\chi\gamma\upsilon$ - is not attested.

equivalent with ἐγγράφετω.¹ It is likewise the context which has to tell us whether ἐγγονος is the equivalent of ἔκγονος or of ἔνγονος.

Moreover, κ and γ, χ and γ varied before μ. This variation was regular with perfective verbs ending in -μαι, -μην, -μεν, -μεθα, -μένος and substantive transpositions in -μα, -μός, -μή like δέδειγμαι, δείγμα, but not in the non-transposition αὐχμός.

3.2.2.3. ε ∼ α. This variant is probably connected with the presence of ρ or λ, which may precede or follow. The well known instance is τέσσερα, etc. In the Apc.-A we find: τεσσαρακοντα 5x (τεσσαράκοντα once), τεσσερα 4x (τέσσαρα: absent), against: τεσσαρας 3x (τέσσερας absent), τεσσαρες 3x (τέσσερες absent). Moreover, we have II 23 εραυνων for ἐρευνῶν, and in P47 δραπανον for δρέπανον (XIV 15, 16, 18), in N* χλιερος for χλιαρός (III 16), in P 47 υελινην (twice) for ὑαλίνην (XV 2). The well-known variation Σάραπις—Σέραπις may belong here, too.²

3.2.2.4. ω ∼ εω. The so-called uncontracted genitives ορεων (VI 15) and χειλέων (Heb. XIII 15) preferably occurred according to Palmer when the preceding phoneme was /l/, /m/, /n/ or /r/. He found a similar phenomenon in words like δαφνεών (by the side of δαφνών) where -εών seems also to be conditioned by the presence of a liquid.³

The following variations are morphologically determined:

3.2.2.5. α ∼ ο. e.g. IX 8 [εἰ]χαν vs. IX 9 ειχον: substitution of the ο- and ε- endings of the aoristus II by α- endings on the analogy of type ἐπαίδευσα.

¹ C.I.G. 5 (2), 357, 14: Stymphalus, III B.C. (Sturtevant, *o.c.*, pp. 64-65). Cf. L. J. D. Richardson, *Double Gamma as True 'Double G' in Greek: A Problem in Phonetic Representation*, Transactions Phil. Soc. London, 1946, pp. 156-176.

² It is true that the different forms of this name, 'Όσοραπις, 'Όσαραπις 'Όσεραπις, (from which initial δ- may have been lost in Greek where it was mistaken for the definite article) find their explanation in the Egyptian language. That does, however, not rule out that in later times the form Σάραπις was probably considered to be more correct than Σέραπις, just as τέσσαρα(ς) vs. τέσσερα(ς), etc. The former is used exclusively by such an Atticist as Aelius Aristides, while the latter may have been more popular and was almost certainly more frequent as it was taken over by Latin e.g. Suetonius, *Vesp.* 7 and Tacitus *Hist.* IV 81, 84. Cf. U. Wilcken, *Sarapis und Osiris-Apis*, Archiv für Papyrusforschung III, pp. 249-251; K. Sethe, *Sarapis und die sogenannten κάτοχοι des Sarapis*, Abh. kön. Ges. Wiss. Gött. Phil.-hist. Kl. N.F. Bd. XIV Nr. 5, Berlin 1913, pp. 4-10.

³ L. R. Palmer, *A Grammar of the Post-Ptolemaic Papyri*, London, 1948, p. 12. On the other hand τευχέων is the usual form in the LXX cf. H. S. J. Thackeray, *A Grammar of Old Testament in Greek*, Cambridge, 1909, p. 151.

3.2.2.6. $\omega \sim \text{ου}$. e.g. II 7 νικουντι for νικῶντι: merging of verb classes νικῶ, -ῃς and φιλῶ, -εῖς.

Of a different kind are: I 1 και εσημανεν απο[στ]ειλας δια του αγγελου αυτου του δουλου [αυ]του Ιωαννη (remaining *mss.*: τω δουλω); either to be explained as a slip on the analogy of the preceding του αγγελου or an instance of the unification of the genitive and dative cases which set in during the first century A.D., and is complete in Modern Greek. Compare for instance from Cappadocia the Christian inscr.: τω φιλοχριστω Θεοδορου¹; V 9 αδωσιν instead of ἄδουσιν: this is to be explained from the process of levelling the differences in form between indicative and subjunctive in class παιδεύω, which arose, after the phonetic change of η[e] to [i] and ω[ō] to [o] had already made e.g. παιδεύει(ς) and παιδεύη(ς), παιδεύομεν and παιδεύωμεν, identical in form.

3.2.2.7. $\epsilon \sim \eta$. Occurs only in the augment of specific verbs e.g. II 21 ηθελησεν and V 3 ηδυνατο; the starting point was probably the variation ἐθέλω—θέλω which resulted of course in different augments.

3.2.2.8. *Addition of -ν to the accusative sg. of words of the 3rd declension* XII 13 αρσεναν, XIII 14 εικοναν, XXII 2 μηναν, is due to the example of the other accusatives in -ν like λόγον, πόλιν, πῖτον.

Ultimately there is a residue of faults which have in all probability nothing to do with phonetic or morphological change: XI 4 αυλαιαι instead of ἐλαίαι, VIII 5 ελαβον for ἔβαλεν, and others.²

3.3. *Orthographical Variants occurring in the Greek Papyri from Egypt c. 400 A.D., but absent from the Apocalypse-A*

If one would now proceed to draw up a phonemic system on the basis of the variants discussed, it would show some differences with the phonemic system which is to be inferred from the papyri contemporaneous with the Codex Alexandrinus. This is mainly due to the absence in the Apc.-A of a number of orthographical variants that do occur in Greek documents from IVth century Egypt. Conversely, however, the variants present in the Apc.-A are all well attested in these documents. The *absent* variations are the following:

¹ C.I.G. 9240. For the unification of genitive and dative see: J. Humbert, *La disparition du datif en grec (du Ier au Xe siècle)*, Paris, 1930.

² The latter error is of frequent occurrence in *mss.*, cf. *app. crit. ad LXX* 1 Kings XIV 42; 2 Kings XX 22; 4 Kings XXIII 4; Neh XI 1.

3.3.1. $\eta \sim \iota$. Some instances: *παρημιν* for *παρήμην* (299 A.D.), *εγεωργισας* for *ἐγεώργησας* (311 A.D.), *φασιλων* for *φασήλων* (308 A.D.), *τραπεζειτι* for *τραπεζίτη* (the 3rd of Jan., 372 A.D.).¹

3.3.2. υ for *οι* is first found in Egypt in 160 B.C., *οι* for υ c. 140 B.C.² Moreover, $\epsilon \sim \iota \sim \eta$ and $\omicron \sim \upsilon$ all tended to merge in Imperial Egypt, for instance *κυρια* for *κυρία* (Vth A.D.), *θηρα* for *θύρα* (IIIrd A.D.), *σκυπτρον* for *σκήπτρον* (IIIrd A.D.), *ενικι* for *ἐνόκιον*.³ The five symbols ι , ϵ , η , $\omicron$, υ indicate therefore only one phoneme /i/ by this time, just as in Modern Greek.⁴

3.3.3. $\omicron/\omega \sim \omicron\upsilon$ seems to have been restricted to unaccented positions. The instances given by Dieterich⁵ should perhaps be supplemented with those that occur in the Greek words that have been borrowed by Coptic.⁶

3.3.4. $\sigma \sim \zeta$ before β and μ in such words as *σβέννυμι*, *σμάραγδος*, frequently in *Σμύρνα* (place-name) and *σμύρνα* ("myrrh"), e.g. *ζμυρνα* (150/139 B.C.).⁷ The conclusion generally drawn is that in Hellenistic times ζ no longer had either of the phonetic values [dz] and [zd], but the value of [z] only.⁸

3.3.5. $\alpha\upsilon \sim \alpha\omicron\upsilon$, $\epsilon\upsilon \sim \epsilon\omicron\upsilon$ e.g. *ταυουτα* for *ταῦτα* (IIInd A.D.), *αουτου* for *αὐτοῦ* (45/47 A.D.), *ερμηνεους* for *ἐρμηνεύς* (45/47 A.D.), *δευουδερου* for *δευτέρου* (139 A.D.).⁹ Compare in the Delphian musical texts the substitution of $\alpha\upsilon$ and $\epsilon\upsilon$ by resp. $\alpha\text{-}\omicron\upsilon$ and $\epsilon\text{-}\omicron\upsilon$,

¹ Respectively: P. Aur. Isid. 4, 20; *id.* 120, 4-5; *id.* 87, 4; P. Vindob. Sijpesteijn 13, 6-7.

² Mayser, *o.c.*, I-1, p. 110-111.

³ Respectively: P. Brit. Mus. 125, 14; P. Leid. II W p. 8, 20; *id.* p. 5, 21; Wessely, Prol. D 53.

⁴ In Apc. III 9 Cowper reads *προσκυνησουσιν* and comments: "*Sic Ms. Woide προσκυνησουσιν, male.*" However, in Thompson's facsimile edition we ourselves could quite clearly distinguish an ypsilon, and agree therefore with Woide's reading.

⁵ K. Dieterich, *Untersuchungen zur Geschichte der griechischen Sprache von der hellenistischen Zeit bis zum 10. Jahrh. n. Chr.*, Leipsic, 1898, p. 15-19.

⁶ See E. A. Wallis Budge, *Coptic Biblical Texts in the Dialect of Upper Egypt*, London, 1912, ad Numeri XXIV 24, and A. Böhlig, *o.c.*, p. 104; of this work pp. 91-116 can be consulted for the orthographical variants occurring in the Greek loan words in the Coptic NT.

⁷ P. Grenf. I, 14, 9 and 10 (Mayser, *o.c.*, I-1, p. 204); cf. Apc. 8 I 11; II 8.

⁸ Schwyzler, *o.c.*, I, p. 217; Sturtevant, *o.c.*, p. 93.

⁹ Respectively: B.G.U. II 615, 7; P. Mich. III 123 v V 17 and II 123 r XXI 8; C.P.R. 198, 5 (S. G. Kapsomenakis, *Voruntersuchungen zu einer Grammatik der Papyri der nachchristlichen Zeit*. Münchener Beiträge zur Papyrusforschung und antiken Rechtsgeschichte XXVIII Munich, 1938, p. 10 and note 2.

when these diphthongs were sung on two notes.¹ In still later times υ in αυ, ευ alternates with β or υβ which represent [v] before voiced, and [f] before voiceless stops, for instance προσαγορευβομε for -εύομαι (IV-Vth A.D.), προσαγορεβσε for -ευσαι (V-VIth A.D.). The reverse occurs in ευδομη for ἐβδόμη (335 A.D.), ραυδους for ῥάβδους (158 and 156 B.C.),² compare also Coptic ϣηπηϣ [hippef] for ἵππευ.³

The occurrence of αυ, ευ for αυ, ευ can best be explained, we think, from the fact that the phonetical similarity of [w] and ου [u], is greater than that of [w] and υ [ü];⁴ αυ, moreover, could be misspelled as αι *e.g.* αιτναιος for Αὐδναῖος.⁵ The coexistence of αυ [aw] and αβ [av, af] may reflect a social difference: it is conceivable that the change of [aw] to [av] started in the speech of the lower classes, and that, for some time at least, the spelling αυ must be evaluated as an endeavour to prevent the vulgar pronunciation [av/af].⁶

The variations αυ-αβ, ευ-εβ presuppose of course that β had become [v] instead of [b], and a spirantic pronunciation is also assumed for γ and δ on the ground of such orthographical phenomena as κραδει for κράζει (Apc. XII 2, P47), κραυη for κραυγή (*id.* XIV 18), and the frequent ολιος for ὀλίγος.⁷

3.3.6. *Loss of Final -v.* That final [-n] had disappeared from spoken Greek in Egypt is concluded from the numerous omissions in orthography. Mayser lists from the Ptolemaic period some 20

¹ O. Crusius, *Die delphischen Hymnen*, Göttingen, 1894, p. 94.

² Respectively: P. Iand. VI 101, 9; P. Ross. Georg. III 10, 6; P. Lond. 1914, 47; P. Par. 40, 33 and 41, 26; Cf. Kapsomenakis, *o.c.*, p. 11 and Mayser, *o.c.*, I-I, p. 115.

³ II A.D., mentioned by Schwyzler, *o.c.*, I, p. 198.

⁴ Cf. Kapsomenakis, *o.c.*, p. 11.

⁵ P. Hamb. 55, 3: III A.D.

⁶ For the pronunciation of υ and ου see: Sturtevant, *o.c.*, p. 42 and 46; in Coptic ⲟⲩ had the values [u] and [w].

⁷ It is on purpose that we do not involve the Greek transcription of Latin names in the discussion. In our opinion they rather complicate than solve the problem, because in Latin there have been variations between the letters b and v, and conversely (Sturtevant, *o.c.*, pp. 142-143). Only a comparative study will be able to assign the increasing use of β for ου in such names as Φλάβιος either to the phonetical development of Greek or to that of Latin. The development sketched above is further complicated by incidental simplifications of αυ to α, and of ευ to ε. If these are found before a following consonant there may have been assimilation of [w] to that consonant. Before ο or ω one cannot be sure: αο/ω and εο/ω themselves are sometimes written for αυ and ευ; there would be then some kind of haplography: αο for αοο.

instances where this happens even before a following vowel.¹ The reverse orthography, namely the incorrect addition of -v, occurs also: τη γυναικιν μου (IVth A.D.), sometimes even where a iota adscript could figure: τη ομολογιαν (514 A.D.); both the instances are datives singular.² The conclusion, however, that no final [-n] was pronounced any longer may go too far. Possibly even the irrational -v represents a spoken sound, and both the omission and the incorrect addition may be evaluated as the substitution of vowel-plus-[-n] by a nasalized vowel.³

3.4. *The original Orthography of the Apocalypse*

3.4.1. *Introduction.* The most frequent ones of the variations *sub* 3.3 were 1, 2, 4, 6. Their total absence from A and P47 (*i.e.* *chrs.* IX-XVI) and their occurrence in the other Apc.-uncials **Σ** and C⁴ admits in theory of two alternative conclusions: a) The relative purity of A is due to the ability of a scribe who knew his orthography. b) The absence of these variations against their presence in the other uncials and against the occurrence of 1, 2, 4 (*sub* 3.2.1) in the Apc.-A reflects characteristics of the original orthography. In other words: the textual transmission up to A has been kept free from those variations that were caused by phonetic changes subsequent to the time of composition of the Apc.

In view of the fact that Apc.-A has retained a number of morphological and syntactical peculiarities where other *mss.* have corrected readings, it is probably equally reliable as to its orthography, and in that case the second conclusion is worthy of our consideration.

¹ *o.c.*, I-I, p. 192.

² P. Oxy. XIV, 1683, 16 and P. Cairo Masp. I, 1, 48.

³ The problem differs from that of the iota adscript in that the latter ultimately disappeared from Greek orthography and from the younger Latin transcriptions; its presence as iota *subscript* in Modern Greek orthography is due to Byzantine classicism. As to final [-n] it appears from the modern dialects of Cyprus, Rhodes, Chios *a.o.* that it has even spread by analogy *e.g.* τα παιδιάν του (παιδιά), ένομαν(-μα), ή ύναϊχαν του (-χα) (*cf.* A. Thumb, *Handbuch der neugriechischen Volkssprache*, Strasbourg, 1910, *par.* 34, 4). For Phrygia D. E. Evans assumed that in the Imperial period vowelsign plus v indicated a nasalized vowel (*Class. Quart.* XII, 1918, p. 165 *ss.*).

⁴ In **Σ**: II 16 συ(= σοι) III 7 ανυγων, ανυξει (= άνοιγ/ξ.) III 9 γνωση (= γνωσιν) VI 1 and 5 ηνωξε(v) 12 ενυξεν XI 19 and XV 5 ηνυγη. (*ed.* F. H. Scrivener, Cambridge-London, 1864).

In C: III 7 ανυγω VII 14 σοι(= σὺ) X 1 ιρης(= ἱρις) X 3 μοικαται(= μυκᾶται) (*ed.* C. Tischendorf, Leipsic, 1843).

We might check then whether the geographical areas and the periods for which the variations absent from Apc.-A have not been attested admit of the date and place of composition as found for the Apc. on the ground of non-linguistic arguments. Let us briefly discuss the latter.

3.4.2. *Place and Date of Composition. Non-Linguistic Evidence.* The Apocalypse of St. John was almost certainly written in Asia Minor: The island of Patmos where he saw the opening vision (I 9) may have been the place of his exile; it is close to the Western coast of this subcontinent, and the churches addressed (I 11) are all situated in the Western part of it, in Lydia or near its borders *i.e.* within the Roman province called Asia (I 4). It is therefore probable that if the language of the Apc. has some *couleur locale* it will be akin to the kind of Greek as spoken in this area, unless the author uses a variety which he learnt elsewhere.

As to the date it is of course evident that the book as it lies before us presupposes Jesus' death (XI 8), but it presupposes also the existence of the church of Smyrna (I 11). Polycarp the later bishop of that church says (*Ad Phil.* XI 3) that it did not yet exist by the time when St. Paul wrote to the Philippians. The assumption that St. Paul dispatched his letter from Rome seems to meet with difficulties,¹ its *terminus ad quem* is therefore 55 A.D., which means that the Apc. must have been composed at least after this year.

The key passage Apc. XVII 10-11 implies that the author is living during the reign of the 6th king of Rome, who may be Vespasian if one starts counting from Augustus and does not include the ephemeral Galba, Otho and Vitellius. But this whole passage can also be understood as implying: "Rome's end is near" in which case it is probably too rationalistic to compute the emperors, because "seven" is merely the number of completeness.

On the other hand the Apc. certainly antedates Bar-Kokhba's revolt (132-5 A.D.) for Justin Martyr represents his dialogue with Tryphon as taking place by the time of this revolt (*ch.* I and IX) and in this dialogue he mentions the Apc. explicitly (*ch.* LXXXI). The book may even antedate the destruction of the Temple, as XI 1-13 seems to suppose its existence, which fits the Vespasianic period unless this reference is not to the actual but to the spiritual Temple (*cf.* III 12).

¹ Cf. *a.o.* Peake's *Commentary on the Bible*, Edinburgh, 1962, 860 b-c.

Finally, the fierce persecution of the Christians and the insistence on emperor worship (XIII 15) seem to be most in line with conditions during Domitian's reign. The internal evidence points therefore to a date up to 96 A.D. for the final redaction, while older material may have been included which antedates the destruction of the Temple. Compare also the testimony of Irenaeus *Adv. Haeres.* V 30, 3: "*Neque enim ante multum tempus visum est sed pene sub nostro saeculo, ad finem Domitiani imperii*".

3.4.3. *Place and Date of the Orthographical Variants in the Apc.-A.* The first occurrence in papyri and inscriptions of the different kinds of orthographical variants differs according to place. This diversity enables us in principle to locate and date the Apc. approximately on the ground of its orthography in A. We assumed above that the original did not yet contain the variations $\alpha\iota\text{-}\upsilon$, $\eta\text{-}\iota$, $\upsilon\text{-}\iota$, of which $\alpha\iota\text{-}\upsilon$ appears almost everywhere before the other two. This means that the underlying phonetic change of [oj] to [ü] is generally earlier than those of [e] to [i], and [ü] to [i]. The place of origin of the Apc. would have to be then within the area where the change of [oj] to [ü] does not occur before c. 100 A.D. It stands to reason that one cannot draw strict lines here because of the accidental character of the documents preserved, but a few facts are fairly certain.

First of all Egypt can be eliminated because $\alpha\iota\text{-}\upsilon$ occurs here already since 150 B.C. Second a great part of Greece can be discarded as a very unlikely place of origin: it is a well known fact that Koine Greek had a predilection for the orthography $-\sigma\sigma-$, where Classical Attic had $-\tau\tau-$. In the Hellenistic period $-\tau\tau-$ is found only in Atticisms, in Atticistic works, and in Greece proper during the 1st century A.D., namely in Attica and some other regions, but $-\sigma\sigma-$ is penetrating even there.¹ As the Apc. has always the spelling $-\sigma\sigma-$ in words like $\theta\acute{\alpha}\lambda\alpha\sigma\sigma\alpha$, Greece can likewise be eliminated.

What remains is Asia Minor, Syria and Palestine. On these countries, however, we are not well informed as far as the 1st century is concerned. The number of dated inscriptions in general is low and only few of these belong to our period. A specification on linguistic grounds within this vast stretch of land is therefore impossible. Phrygia, Rhodus and Lycia might still be eliminated as there are some inscriptions there which contain the variation $\alpha\iota\text{-}\upsilon$ and may

¹ K. Meisterhans-E. Schwyzler, *Grammatik der attischen Inschriften*, Berlin, 1900, p. 101 and W. Lademann, *De titulis Atticis quaestiones orthographicae*, Kirchhain, 1915, p. 58.

date from the 1st century.¹ This variation might then have been earlier in these countries than in Western Asia Minor, where it is found for the first time in Coloe (Lydia) in 126 A.D.² As to the other variations: η - ι is demonstrable in Asia Minor only in 166 A.D., in Palestine perhaps in 140 A.D.;³ σ was certainly pronounced [z] in $\sigma\mu$, $\sigma\beta$; ⁴ final [-n] was not lost as far as we can judge, except perhaps in Miletus; ⁵ it is difficult to say whether β , γ , δ were spirants or explosives, the evidence for spirants being scarce and doubtful, *a.o.* Ευδομιος for ? Εβδόμιος in Smyrna, and ολιους for ὀλίγους in Sardes (225-175 B.C.); ⁶ εου for ευ , however, is found in Pergamum.⁷ If the spirantic and explosive pronunciations coexisted there was probably complementary distribution, as in Modern Greek.

On the other hand the variations occurring in the Apc.-A are all attested in inscriptions from Asia Minor, Syria and Palestine.⁸ Date

¹ W. M. Ramsay, *Cities and Bishoprics of Phrygia*, Oxford, 1895, *nrs* 70 and 559; *p.* 150 note 1.—B. Bondesson, *De sonis et formis titulorum Milesiorum Didymaeorumque*, Lund, 1936, *p.* 50.

² Schweizer, *Perg. Inschr.*, *p.* 80; in Pergamum, Magnesia, Sardes, Priene, Miletus it is not found; in Attica *c.* 240 A.D. Meisterhans-Schw., *o.c.*, *p.* 59. The successive volumes of the *Supplementum Epigraphicum Graecum* do not contain, as far as we can see, any instances earlier than 126 A.D.

³ Schweizer, *Perg. Inschr.*, *p.* 47; E. Littmann-D. Magie-D. R. Stuart, *Greek and Latin Inscriptions in Syria*, Leyden, 1921, *vol.* III-a, *nr.* 792: τη Αταργατης *i.e.* either τῇ 'Αταργατῖς (undeclined) or τῇ 'Αταργάτης (*gen.* and *dat.* confused). In Attica *c.* 150 A.D. see Meisterhans-Schwyzler, *o.c.*, *p.* 19.

⁴ E. Nachmanson, *Laute und Formen der magnetischen Inschriften*, Uppsala, 1904, *p.* 85; A. Scherer, *Zur Laut- und Formenlehre der milesischen Inschriften*, Munich, 1934, *p.* 57; F. Hiller von Gaertringen, *Inschriften von Priene*, Berlin, 1906, *p.* 258 (65, 14-15); *cf.* Meisterhans-Schw., *o.c.*, *p.* 88.

⁵ Nachmanson, *o.c.*, *p.* 81; (*cf.* Dieterich, *o.c.*, *pp.* 88-91); Miletus: Scherer, *o.c.*, *p.* 56.

⁶ W. H. Buckler-D. M. Robinson, *Sardis*, *vol.* VII, 1, Leyden, 1932, *nr.* 2, 11; F. Bechtel, *Die griechischen Dialekte*, Berlin, 1924, III, 40. Ευδομιος is considered by Pape's dictionary of names as Εὐδόμιος "schöngestaltet". *Cf.* Schweizer, *Perg. Inschr.*, *pp.* 106-108.

⁷ Schweizer, *Perg. Inschr.*, *p.* 83; *cf.* Nachmanson, *o.c.*, *p.* 60 and Schwyzler, *o.c.*, I, *p.* 198.

⁸ ει-ι : Schweizer, *Perg. Inschr.*, *p.* 52, 72, 73; Nachmanson, *o.c.*, *pp.* 21, 35; Hiller v.G., *o.c.*, *pp.* 257-258 (index); Scherer, *o.c.*, *pp.* 45-46; Meisterhans-Schw., *o.c.*, *pp.* 48-49; F. K. Dörner, *Inschriften und Denkmäler aus Bithynien*, Berlin, 1941, *nr.* 34, 9-11 (99 A.D.); Littmann-Magie-Stuart-Prentice, *o.c.*, *p.* 296 (655, 2: Hauran, S. Syria), *p.* 143-144 (1111: Djebel Halakhah, N. Syria); L. Jalabert-R. Mouterde, *Inscriptions grecques et latines de la Syrie*, Paris, 1929-1953, *nr.* 1 *passim* (Tumulus of Nemrud Dagh, Commagene, before 31 B.C.) and *nr.* 1185 (Antiochia); P.V.C. Baur-M. I. Rostovtzeff-A. R. Bellinger, *The Excavations at Dura-Europos*, *vol.* III, New Haven-London, 1932, *p.* 56 D 153 and *p.* 63 D 161 (2 A.D.);

and place of origin of the Apc. as concluded from its contents *etc.* are therefore confirmed, or rather not contradicted by the orthographical evidence furnished by the Apc.-A for locating its variety of Greek in Western Asia Minor.¹

3.4.4. *Conclusions.* The autographon of the Apc. contained in all likelihood the following orthographical peculiarities: variation $\epsilon\iota$ - ι and absence of iota adscript; the variations $\alpha\iota$ - ϵ , $\omicron$ - ω may have been present, if not, the corresponding phonetical changes must be assumed anyhow; the same holds good of the loss of spiritus asper. Moreover, an addition has to be made: in Asia Minor there is confusion of $\epsilon\iota$ and η before an α or $\omicron$ in the same word: Καρηας , Εφεσηα (both IInd A.D.), Διδυμηα (c. 22 A.D.).² It is supposed that the phonetic value of $\epsilon\iota/\eta$ in this position was [e].

For Ist century Koine-Greek as spoken in Western Asia Minor the

$\omicron$ - ω : Schweizer, *Perg. Inschr.*, p. 95; Meisterhans-Schw., *o.c.*, p. 68; Nachmanson, *o.c.*, p. 64; Scherer, *o.c.*, p. 53; Bondesson, *o.c.*, pp. 30-31; P. Herrmann, *Ergebnisse einer Reise in Nordostlydien*, Vienna, 1962, nr. 18, 5 (Koresa: 118-9 A.D.);

ϵ - $\alpha\iota$: Schweizer, *Perg. Inschr.*, p. 78; Meisterhans-Schw. *o.c.*, p. 34; Nachmanson, *o.c.*, p. 37; F. K. Dörner, *o.c.*, nr. 34, 9-11 (99 A.D.); Baur-Rostovtzeff-Bellinger, *o.c.*, p. 63, D 161;

loss of spir. asper: Schweizer, *Perg. Inschr.*, pp. 116-117; Nachmanson, *o.c.* p. 84; Jalabert-Mouterde, *o.c.*, nr. 465, 2 (Koryphe-Syria: 86 A.D.);

ny ephelkystikon: Nachmanson, *o.c.*, p. 110; Scherer, *o.c.*, p. 62;

loss of iota adscript: Schweizer, *Perg. Inschr.*, pp. 86, 88; Meisterhans-Schw., *o.c.*, p. 67; Nachmanson, *o.c.*, pp. 49, 53, 55.

¹ Although the remaining N.T. writings are neither written in Koine Greek provenient from Egypt or Phrygia their uncials are not wholly devoid of the orthographical confusion $\omicron\iota$ - υ , especially not in the verb $\acute{\alpha}\nu\omicron\lambda\gamma\omega$ (for $\aleph$ and Cf. above, par. 3.4.1; for the rest of codex A see: F. G. Sturzius, *De dialecto Macedonica et Alexandrina liber*, Leipsic, 1808, p. 121-122; H. Herveii Baber, *Vetus Testamentum Graecum e Codice MS. Alexandrino*, vol. I., London, 1816, p. X; Woide-Cowper, *o.c.*, p. X-XI; cf. J. H. Moulton-W. F. Howard, *A Grammar of N.T. Greek*, Edinburgh, 1957, vol. II, p. 82-83, and R. Hanhart, *Esther, Septuaginta, V.T. Gr. Auct. Acad. Litt. Gott. editum*, vol. VIII, 3, Göttingen 1966, p. 106. In the 13 N.T. papyri from Oxyrhynchus (III-IV A.D.) Howard found only three instances: in P. Oxy. 657).—This may be due to a more frequent copying of gospels and letters, which increased the chance of phonetic spellings; on the other hand it is known that the Apc. was rejected for quite a time—c. 300-450 A.D.—by the churches of Palestine, Syria and Asia Minor (cf. Charles, *o.c.*, I, p. CI-II). According to H. J. Vogels, *Handbuch der Textkritik des Neuen Testaments*, Bonn, 1955, p. 31 there are 1277 gospel-manuscripts: "Im Vergleich damit ist die handschriftliche Überlieferung der Apokalypse geradezu kümmerlich zu nennen."

² Nachmanson, *o.c.*, p. 21 and 42; Scherer, *o.c.*, p. 44; cf. Schweizer, *Perg. Inschr.*, p. 55.

evidence points then to the following approximate phonetic values of the letters:

α[a], ε[ɛ], η[e], ι[i], ο/ω[o], υ[ü]
 αι[ɛ], ει[i], but [e] before α, ο, ω; οι[oj]?, αι if from ᾱι [a], ηι[e],
 ωι[o], αυ[aw], ευ[ɛw], ου[v]
 β[b], γ[g] but [ŋ] before γ, κ, χ, μ, ν; δ[d], π[p], κ[k], τ[t], φ[ph],
 χ[kh], θ[th], σ[s] but [z] before μ, β; μ[m], ν[n], λ[l], ρ[r], σσ[s, ss?].

These equations are inferred from the combined evidence furnished by the various traditions of pronunciation (starting with Modern Greek), the ancient transcription of Greek words in Latin, the ancient description of phonetic values, and finally by comparative linguistics. For the discussion of all these we refer to Sturtevant's *The Pronunciation of Greek and Latin*.¹ In view of the uncertain chronology and distribution of the spirantic pronunciation of β, δ, γ, the symbols [b, d, g] will represent both the voiced explosives and the possible spirantic variants.²

3.5. *Accentuation*

3.5.1. *Introduction.* In this paragraph we shall use the terms "accent", "accentuation", "acute (accent)", "circumflex (accent)" etc. to refer to the actual phenomena present in spoken language, but the terms "accent mark (sign)", "accent notation", "acute mark" etc. to refer to the graphical indications of these phenomena.

Authentic accent marks have been placed in *cod.* A in the book of Genesis only; the Apocalypse of St. John does not therefore contain any original accent marks: the few that are found in this book figure in the corrections by a cursive hand in XXI 14 and XXII 18. Since the other old manuscripts and papyri of the Apc. are likewise devoid of accent notation we cannot know whether there were any deviations in the accentuation. Some general remarks on the accentuation of Koine Greek are, however, to be made.

First about accent as such. Mol and Uhlenbeck have made it probable that in all kinds of accent it is only the differences in pitch and/or duration that are relevant,³ and Bolinger further demonstrat-

¹ E. H. Sturtevant, *The Pronunciation of Greek and Latin*, Philadelphia, 1940, 2nd ed.

² Cf. Sturtevant, *o.c.*, pp. 86-88.

³ H. Mol and E. M. Uhlenbeck, *The Linguistic Relevance of Intensity in Stress*, *Lingua* V, 1956, pp. 205-214.

ed this point by more extensive material.¹ This means that differences in loudness or intensity, if any, are not essential to the prominence of accented vowels, which appears from the fact that they can be technically removed (for instance from telephone calls) without destroying the prominence of the syllables in question.² The essential difference between the so-called "dynamic accent" and "musical accent" lies therefore likewise in pitch and/or duration, not in loudness.

3.5.2. *Acute and Circumflex Marks.* For Classical Attic accent has been described by ancient grammarians as being based on differences both in pitch and duration. The various metres used in poetry, however, were based on differences in duration only.

According to Sturtevant the accent indicated by the acute mark was a rise in pitch and the one indicated by the circumflex sign was a rise followed by a fall in pitch.³ The former occurred in long and short vowels, but the latter only in long vowels or in diphthongs. The last vowel of a word could have the acute mark only under special circumstances, for instance, when the word was used isolated (see below), but in other surroundings the accent of such a word was indicated by the grave sign.

Of a fourth kind of accent called μέση or *media* the ancient grammarians tell us nothing more than the name. It may have been some secondary accent.⁴

By the Hellenistic levelling of the vowel quantities the nature of Greek accent was modified as there remained now differences in pitch only, not in duration and pitch.⁵ The circumflex accent seems to have disappeared and to have been substituted by the acute, that is, the second element of the circumflex, the fall in pitch, was probably skipped when the difference between long and short vowels was given up: what remained of the former circumflex was then the rise in pitch, which could of course not be distinguished from the acute accent.⁶ Nevertheless the circumflex *mark* has been

¹ D. L. Bolinger, *A Theory of Pitch Accent in English*, Word XIV, 1958, pp. 109-149.

² For an attempt to locate the concomitant stress, if any, in Ancient Greek, see W. Sidney Allen, *Tone and Stress in Ancient Greek*, in *For Roman Jakobson*, The Hague-Paris 1967, p. 46 ss. and *Prosody and Prosodies in Greek*, Trans. Phil. Soc. 1966, Oxford 1967, p. 107 ss.

³ *o.c.*, p. 95.

⁴ Sturtevant, *o.c.*, p. 100.

⁵ Cf. above *parr.* 3.2.1.2, 3.2.1.4.

⁶ Cf. Schwyzer, *o.c.*, I, p. 394.—. Even sequences of two identical vowels

retained up to the present day; the difference therefore between *e.g.* καλῶς and καλός has been purely orthographical since the Hellenistic period: both represent(-ed) [kalós]. Only the position, not the nature of the accent could now be word-distinctive, for instance τόμου [tómu] “piece” *vs.* τομοῦ [tomú] “sharp”.

The traditional metres of poetry which were exclusively based on differences in duration did not fall into disuse, but we have no means of knowing how they were read or sung. There is of course the possibility that a more old-fashioned pronunciation was retained by the poets, but indications are not lacking that pitch started to play some rôle in poetry as well, for instance in 1 Tim. III 16 (c. 65 A.D.), in Babrius’ fables, and in Gregory Nazianzen’s *Exhortatio ad Virgines*, and *Hymnus Vespertinus*.¹

3.5.3. *The Grave Mark.* As this mark could not occur in isolated words, we must see what rules the Byzantine system of accent notation comprises with regard to the substitution of the acute mark by the grave mark. These rules are the following:

- a) words with a penult or antepenult acute mark when isolated, are not subjected to any change in the accent notation when used in a sentence;
- b) words with a final acute mark when isolated, retain this mark:
 - (1) before a comma, and at the end of the sentence: ὁρῶ τὸν ἔππον τὸν καλόν.
 - (2) when followed by an enclitic (unaccented) word: καλόν τι.
 - (3) in interrogative words in any position: τί λέγεις;
- c) everywhere else the acute mark is replaced by the grave mark: ὁρῶ τὸν καλὸν ἔππον.

Moreover, words with antepenult acute mark or penult circumflex mark get an extra acute mark on the final syllable when they are followed by an enclitic word *i.e.* a word which has no accent of its own *e.g.* λέγομεν but: λέγομέν τι, εἶδον but: εἶδόν σε.

were sometimes represented by one vowel symbol: Apc. II 20 αφεις *i.e.* ἀφίεις, XVI 6(A) πειν, C πιν *i.e.* πιεῖν (so **N**, 046). For πειν in the LXX cf. Thackeray, *o.c.* p. 64. According to P. Kretschmer, *Die griechischen Vaseninschriften ihrer Sprache nach untersucht*, Gütersloh 1894, p. 90 note 3, πει occurs for πειν on a black figured vase in the Museo Gregoriano.

¹ Cf. H. J. Rose, *A Handbook of Greek Literature*, London, 1956, p. 396, and O. Bardenhewer, *Geschichte der altkirchlichen Literatur*, vol. III, Darmstadt 1962, p. 181. See also P. Maas, *Das Weihnachtslied des Romanos*, Byz. Zeitschrift XXIV, 1923-24, pp. 1-13, and A. Dihle, *Die Anfänge der griechischen akzentuierenden Verskunst*, Hermes 82, 1954, pp. 182 ss.

It has been a matter of much dispute to what kind of accent the grave mark refers.¹ By the ancient grammarians it was always described in terms which suggest that it was a fall in pitch. It is a well known fact that in the older or Alexandrian system of accent notation the grave mark was used to indicate the vowel which *preceded* the accented syllable: the latter syllable could have an accent mark of its own or not *e.g.* ἐμῶν, παραινῶ, φίλῃσιςτέφανον, but this direct indication was also omitted *e.g.* ἀγαθόν, κραταίη, ἀγκας, ἀγλάα, δέξιαι, ἐτέον, κρατέρωι (= -ῶ), αλεώρης (= -ῆς). Accented *initial* syllables were marked, just as in the later system of accent notation. There existed also notations like Θεόδωρος, in which *all* the unaccented syllables had the grave sign.²

Laum has pointed to the increasing uncertainty in the older accent notation during the IIIrd century, for instance in the Odyssey-papyrus of the Rylands Library: χαλκός (χ 278) by the side of χαλκός (ω 524), οδυσσεύς (ψ 129) and οδύσσεύς (ψ 370), ὀδυσσεῦ (χ 164), οδυσσεύς τε (ξ 470) and οδυσσεύς τε (χ 336), αὐτίκα (ψ 362) *etc.*; in the Papyrus Bankes even αινῶς (198, = -ῶς), εὼν (211, = -ῶν), κλισμῶ (597, = -μῶ) *etc.*³

About 400 A.D. Theodosius of Alexandria introduced the newer, Byzantine system of notation, which is still in use. Each word was written now with only one accent mark, except for cases like λέγο-
μέν τι; the grave mark was written to replace the final acute mark under specific circumstances (see above); the absence of any accent mark could no longer imply in an indirect way that the syllable in question had the accent, as it did in ἀγκας.

Laum's thesis that the new application of the grave sign resulted from the sanctioning of such displacements of accent marks as shown above meets with difficulties. According to him the grave sign did not indicate some kind of sandhi-accent, but was only an orthographical variant of the acute mark; both indicated —according to Laum—the acute accent or rise in pitch.

First of all this use of the grave mark is already found in the

¹ Schwyzer, *o.c.*, I, pp. 374-375. B. Laum, *Das alexandrinische Akzentuationssystem*, Paderborn 1928, pp. 405, 406, 458, 460, 462.

² *o.c.*, pp. 460, 464-466 (A. S. Hunt, *Catalogue...*, Manchester 1911, 53; P. Bankes = Br. Mus. Pap. 114).

³ Cf. W. S. Allen, *Vox Graeca*, Cambridge 1968, p. 115, who remarks with regard to the grave mark that it is uncertain whether it represents "full or partial lowering or graphic peculiarity."

Alcman-papyrus which dates from the *first* century B.C.¹ Laum explains the above displacements of the accent sign as resulting from the inaccuracy of scribes and *diorthotai* (correctors, revisers) who did not check their movement to the right: *e.g.* ὀδύσσευς became οδύσσευς, αἰνώς became αινῶς, and αὐτίκα resulted in αυτίκα. Apart from the fact that this explanation does not hold, we think, for the rare cases like αὐτὸς (ψ 68), νῆμερτές (χ 166), the whole theory fails to explain why the alleged sanctioning of such displacements remained restricted to words like αὐτὸς (from αὐτός), whereas αινῶς and αυτίκα (from αἰνώς and αὐτίκα) were rejected. We have the impression that Theodosius' reform consisted only of confining the number of accent signs per word to one placed on the accented vowel and to do away with the absence of signs as a positive indication. He did not assign new functions to the old signs, but distributed them according to *one* rule, whereas the older system followed two rules: it could mark the unaccented vowels and leave the accented syllable devoid of any sign, or it marked the accented vowel only; moreover, there occurred in practice combinations of both principles *e.g.* φιλήσιςτέφανος.

Now it is clear that in theory Theodosius could have dispensed with the grave sign because he had no longer any function for it. But in practice he did not abolish this sign, evidently reserving it for the indication of an accent which had disappeared or undergone some reduction, as compared with the accent of the isolated word. Sturtevant suggests that the grave sign may have indicated some kind of secondary accent.² This whole explanation is in line with the statements of the ancient grammarians who described the grave sign as indicating a fall in pitch and certainly not as an orthographical variant of the acute sign.

It has been frequently remarked that these people did not quite accurately distinguish the spoken accents from the accent marks. Although this cannot be wholly denied we think it unlikely that they were sometimes adducing all kinds of comparisons merely to illustrate the difference between the written ' and ', while it would have sufficed simply to show the latter in the text as we just did. Take for instance Arcadius: τῶν δὲ τόνων τὴν μὲν ἄνω τείνουσαν καὶ εὐθεῖαν καὶ εἰς ὀξὺ ἀπολήγουσαν εἰκνύαν τοῖς βέλεσι τοῖς ἐφιεμένοις

¹ A. Debrunner, *Recension of Laum's work*, Byz. Zschr. XXIX, 1929, p. 50-55.

² *o.c.*, p. 100-101.

ὄξειαν ἐπονομάσας' (sc. Aristophanes of Byzance), τὴν δὲ ἐναντίαν ταύτῃ βαρεῖαν'.¹ In our opinion we have in this passage both a description of two kinds of pitch, illustrated by a comparison with the sound of arrows or other missiles, not with their trajectory, and a graphical demonstration of the signs.

We assume therefore that the orthographical replacement of the final acute sign by the grave sign within the sentence corresponded to some modification or reduction of the acute accent and that this modification was a feature of the sentence intonation.

All this does not mean that Theodosius' reform reflected a change in the accentuation or intonation; he merely brought more consistency into the writing of the accent marks that were traditionally written. Had he intended to picture the contemporaneous accentuation of 400 A.D., he would almost certainly have had to abolish the circumflex sign, because it is extremely doubtful, whether the circumflex accent was still alive, even in the language of the more conservative groups of the population.

3.5.4. *Conclusions.* The accentuation described by ancient grammarians was supposed to be valid for Classical Attic. As we have said above the circumflex accent disappeared in the Hellenistic period when the vowel quantities were levelled: in Modern Greek orthography ~ and ' both indicate a rise in pitch. These changes are sometimes reported by the Attistic lexicographers, for instance by Moeris p. 203:² μᾶζαν προπερισπωμένως καὶ μακρῶς Ἀττικοί· βαρυτόνως καὶ βραχέως Ἑλληνες (cf. also s.v. βότρως, ἱερεῖα, ἱππεᾶς), ξυρόν, πάπυρος, πνῖγος, τριπλᾶ, ψιμῦθιον). It is difficult to say whether these entries are meant as general models or only as corrections of incidental errors that had crept in from popular pronunciation. In any case they seem to suggest that the rhetoricians maintained the older quantities and accents somewhat longer than the common people.

As the circumflex was replaced in the spoken language by the acute it may have been subjected within the sentence to the same reduction as the latter, but the traditional accent notation hides such a modification if any.

Absolutely nothing is known about the accentuation of Greek as spoken by the Jews. St. John, who was so strongly influenced—as we shall show later on—by the Semitic verb system when using

¹ Ed. E. H. Barkerus, Leipsic, 1820, p. 187.

² Ed. I. Bekker, Berlin, 1833.

Greek verbs, is likely to have spoken his Greek with a Hebrew or perhaps Aramaic intonation, but all this can not be studied due to the simple fact that we are dealing with a written document from the past.

3.5.5. *Excursus on Sentence Intonation.* Although this subject belongs properly to syntax we shall discuss in this connection what can be concluded about intonation from the ancient descriptions of accent, which are all descriptions of *word* accent. We have to look there because no ancient works on intonation have been preserved.

The retention of the acute accent before a full stop may be explained as part of a rising intonation towards the end of the sentence. It is, however, curious to learn from Arcadius that the full stop was accompanied by lower pitch: *τελείαν στιγμὴν . . . βαρύνουσιν τὴν φωνήν*.¹ How are we to account for this apparent contradiction? First of all it is certain that Arcadius' chapter on the invention of the accent marks does not stem from Herodian's lost work on accentuation, of which the rest of Arcadius' treatise is an abridged edition, one of the arguments being that this specific chapter occurs in only one of the mss. Cohn considered it an interpolation made by the XVIth century forger Diassorinos,² but Laum has argued that possibly Theodosius of Alexandria was the author of this part, which makes it again roughly contemporary with Arcadius himself.³ If it is really an interpolation dating from much later times, it is evident that we need not bother about it as it is likely to reflect a quite different linguistic situation.

Second we think that the two statements may be complementary and need not necessarily contradict one another if they do not apply to different stages of the Greek language. The words *τελείαν στιγμὴν . . . βαρύνουσιν τὴν φωνήν* may refer to those sentences of which the final word was not accented on the last syllable *e.g.* *οὐκ ἔχω ἔππον*. That would mean that the second syllable of *ἔππον* had perhaps a higher pitch *within* the sentence than at the end of the sentence. All this is of course highly speculative, the more so as the grammarians do not distinguish between assertions and questions. What the two statements have in common is that the intonation had a part in marking the end of the sentence.

¹ *Ed.* Barkerus, p. 189.

² L. Cohn, in *Philologische Abhandlungen Martin Hertz dargebracht . . .* 1888, p. 141 ss.

³ *o.c.*, p. 99-118.

We said that the grammarians do not tell us whether there were intonational differences between assertions and questions, the question mark being a medieval invention.¹ One might suppose that there was no question melody because one could use special interrogative words τίς, ποῦ, ἄρα, μῶν and in the N.T. also εἰ: *e.g.* Acts XIX 2 εἰπὲν (sc. St. Paul) τε πρὸς αὐτούς· εἰ πνεῦμα ἄγιον ἐλάβετε πιστεύσαντες; On the other hand there are instances of questions from which such words are absent *e.g.* John IX 19-20 καὶ ἠρώτησαν αὐτοὺς λέγοντες· οὗτός ἐστιν ὁ υἱὸς ὑμῶν, ὃν ὑμεῖς λέγετε ὅτι τυφλὸς ἐγεννήθη; It lies at hand to suppose that such questions, just as in Modern Greek,² were recognizable by a special tone.

It is absolutely unknown to what degree the intonation provided syntagmatical indications, for instance, to mark off word groups. Dio Chrysostom discusses (X 24-25) the oracle given by Apollo to Laius the future father of Oedipus, which seems to have been completely ambiguous:

(ἔχρησεν οὖν·) μὴ γεννᾷν ἢ γεννήσαντα ἐκτιθέναι.

In this sentence μὴ may be connected with γεννᾷν only in which case the oracle would mean: "not-to-begét, or if he díd, to expóse". The negation may also be connected both with γεννᾷν and with ἐκτιθέναι: in that case the meaning would be: "nót to-beget-or-if-he-did-to-expose". Did Dio not pay attention to the difference in tone argumenti causa, or may we conclude that there was no such difference?

A second point which we can only guess at is whether the intonation played a rôle in giving emphasis to a special word or word group in the sentence. It is of course possible that there did not exist a contrastive tone and that emphasis depended on word order combined with the use of emphasizing particles like μὲν, δὲ, γὰρ.

3.6. *Interpunction of the Codex Alexandrinus in the Apc.*

This interpunction consists of only three signs:

- (1) A dot above a vowel indicates the spiritus asper *e.g.* I 3 ὁ γὰρ καιρός;
- (2) Two dots are placed on initial ι and υ *e.g.* I 2 ἴδεν, I 9 ὑμῶν; placed on a vowel sign within a word they indicate that it should not be read in combination with a preceding vowel sign as a digraph: II 6 νικολαΐτων, perhaps also in I 13 ὕψω;³

¹ Blass-Debrunner, *o.c.*, *par.* 16.

² Thumb, *o.c.*, *p.* 171.

³ Cf. Blass-Debrunner, *o.c.*, *par.* 8.

- (3) A dot above the line in between the words has several functions:
- a) it indicates apocopated vowels of prepositions *etc.* *e.g.* II 13 παρ· ὑμιν, II 4 ἀλλ· ἐχω, but is also found after οὐκ *e.g.* II 21 οὐκ· ἠθελήσεν
 - b) it indicates both full stops and minor stops.

Minor stops are found before: relative pronouns and adverbs, conjunctions, direct speech, indirect questions (*e.g.* II 7 ἀκουσατω· τι το πν(ευμ)α λεγει) and words followed by γάρ or δὲ (*e.g.* I 3 γεγραμμενα· ὁ γαρ καιρος εγγυς). The application of the whole punctuation is inconsistent: on the one hand the dot is not always found where there is certainly a full stop, *e.g.* after εμου in III 20 διπνησω μετ αυτου και αυτος μετ εμου (2I) ο νικων δωσω αυτω *etc.* On the other hand it is placed rather mechanically, for instance, before many a και where it can hardly represent a stop: II 15 ουτως εχεις· και συ κρατουντας *etc.*; in II 17 it is found even before καινον probably misread as a και: ονομα· καινον γεγραμμενον· Moreover, there is punctuation before appositions and those adjectives or participles that do not follow immediately on the substantive *e.g.* II 14 τω βαλακ· βασιλει· and I 16 και εκ του στοματος αυτου ρομφαια διστομος οξια· εκπορευομενη· *etc.*

Finally there are cases that cannot be explained *e.g.* III 22 ο εχων ους· ακουσατω.

As there are no New Testament autographs we do not know whether the authors used interpunction or not, but at any rate it cannot have been very extensive if we are to judge from contemporary punctuated documents. In all probability the interpunction of our N.T. manuscripts does not contain many original marks but is chiefly a secondary matter.

CHAPTER FOUR

PHONOLOGY

4.1. *Consonants. Introduction*¹

In order to describe the distribution of the consonants in Koine-Greek it is necessary to distinguish between three positions:

- (1) medial position: in the middle of the word, preceded and followed by a vowel;
- (2) initial position: at the beginning of the word, followed by a vowel;
- (3) final position: at the end of the word, preceded by a vowel.

In a word there can of course be only one initial, and one final position, but several medial positions, for instance in θάλασσα, θυσιαστήριον, ὑπερεκπερισσῶς. As far as we know Koine-Greek did not have any words that did not contain any vowels, but words without consonants did occur e.g. ᾠα [óa].

Each of the three positions mentioned could be occupied by a single consonant, or by clusters of two or three consonants. Clusters of four were restricted to the medial position, whereas clusters of five or more are not found at all. The occurrence of single consonants and clusters is subjected to more restrictions in the initial and final positions, than in the medial positions. Moreover, it will appear to be relevant to make a distinction between:

a) Clusters of which the constituent consonants can only fall entirely within one of those parts of a word that are correlated with different elements of the word meaning: these we shall call *indivisible clusters*.

b) Clusters of which the constituent consonants may belong partly to one and partly to the following part of the word, for instance in πλῆκτρον: these clusters will be termed *divisible clusters*.

The mutual combinability of the different consonants is less limited in b) than a), and within b) the clusters occurring in non-compounds are different from those that are found in compounds. We

¹ The term 'phonology' is here equivalent with 'phonemics', not with 'phonetics'. It is beyond our present scope to discuss the theoretical background; the method followed is mainly that of the Prague School as displayed by J. Vachek, *On Some Basic Principles of Classical Phonology*, Zeitschr. für Phonetik 17, 1964, pp. 409-431; cf. J. Vachek, *The Linguistic School of Prague: an Introduction to its Theory and Practice*, Bloomington 1966, pp. 40-78.

shall therefore begin by describing the consonants and clusters in the medial positions, and proceed from the indivisible to the divisible clusters, with the exception of those found in compounds, of which we shall for the time being postpone the discussion. Next we shall list which of the medial consonants and clusters may also occur in the other positions. Finally we shall discuss the clusters found in compounds, as these will appear to be combinations of the final and initial clusters occurring in non-compounds. In paragraphs 4.1.1 up to 4.1.7 we shall omit the square brackets wherever this can be done without risking any mis-understanding of the fact that phonetic values are meant.

4.1.1. *Distribution of Consonants in Medial Position. Non-Compounds.*

a) *Single Consonants*: all consonants except -ŋ-.

b) *Clusters of Two Consonants*. The difference between divisible and indivisible clusters is not relevant with regard to non-compounds. Combinations of two identical consonants no longer occurred: orthographical geminates had the value of a single consonant (see *par.* 3.2.1.13). -j-, -w- and -ŋ- never occur as the second consonants of a cluster.

b-1. Explosive plus explosive. Both are either voiced or unvoiced. The first cannot be aspirated: -φθ- and -χθ- are misleading orthographies and represent resp. -pth- and -kth-. The second consonant is always a dental explosive, the first either a labial or a velar explosive: -bd-, -pt-, -pth-, -gd-, -kt-, -kth-.

b-2. Explosive plus continuant except -z- and -j-, -w-, -ŋ- (see above). Together there are 33 combinations. Non-occurrent are: labial plus -m-, dental plus -s-, voiced or aspirated labial/velar plus -s-, and -bn-, -dl-.

b-3. Continuant plus explosive. Together 54 combinations. Restrictions: -s- plus unvoiced only, -z- plus voiced only; -m- plus labial, -n- plus dental, -ŋ- plus velar only. Non-occurrent is -w- plus labial, except in the Egyptian loan word ναύβιον.

b-4. Continuant plus continuant. The occurrence (or non-occurrence) of the combinations does not seem to follow any specific rule. The following are found: -j- plus all, -w- plus all, -lm-, -ls-, -mn-, -ŋn-, -ŋm-, -ns-, -rm-, -rn-, -rs-, -sm-.

c) *Clusters of Three Consonants*.

Indivisible clusters of three seem to have been in Koine-Greek only those which consisted of continuant—explosive—continuant *e.g.*

ἄνδρα, ἄνθρωπος, ἄντρον, ἀντλεῖν, κέγχρος. We have the impression that the other indivisible clusters of three which occurred in Classical Attic were avoided in Koine-Greek: the older βάκτρον "stick" (not comparable to words like πλῆκτρον) was supplanted by βακτηρία, and ἄρκτος "bear" was modified to ἄρκος. On the other hand the word ἤλεκτρον "amber" was retained, perhaps because it was less frequently used. Foreign names like τὰ Βάκτρα "Bactria" are of course loan words which can be left out of account.

Divisible Clusters of Three. The first plus the second, and the second plus the third consonant can only be combinations that are allowed to occur as medial clusters of two consonants. Each combination of three consonants is therefore subjected to two kinds of restrictions. For these restrictions we refer each time to the preceding section b) and its subdivisions.

c-1. Labial/velar explosive—dental explosive— -r-: -ptr-, -ktr-, -kthr- (cf. b-1. and b-2).

c-2. Continuant—velar/labial explosive—dental explosive: -lkt-, -rkt-, -ηkt-, -jkt-, -wkt-, -lpt-, -mpt-, -jbd- (cf. b-3 and b-1.).

c-3. Continuant—explosive—continuant: 71 combinations including those consisting of -w- —labial explosive—continuant (contrary to b-3; cf. also b-2); these are the only medial three consonant clusters that can also be indivisible (cf. above); absent from non-compounds are: -r- —labial/velar expl.— -r-, -s- —p/ph—continuant, -z- —(voiced) expl.—continuant.

c-4. -j/w- — -s- —explosive (cf. b-4 and b-3).

c-5. Three successive continuants: -wsm- (or: -wzm-?), -jzm- (or: -jzm-?), -wmn- and -rmn-; the latter occurs only in μέρμνος which may be Lydian.

d) *Clusters of Four Consonants.* These clusters are always divisible.

d-1. Continuant— -s- —explosive— -r-/l-: -jstr-, -wstr-, -wsth- (cf. c-4, c-3)

d-2. Continuant—explosive—explosive— -r-: -jktr-, -lktr- (cf. c-2, c-1).

4.1.2. *Remarks. Consonants in Medial Position*

Ad b-1: φθ and χθ were phonetically -pth- and -kth-.¹ The values of these lettergroups in Modern Greek resp. -ft- and -χt- do not prove anything with regard to the Hellenistic pronunciation, be-

¹ Schwyzer, *o.c.*, I, p. 210-211.

cause the latter have arisen from -pt- and -kt-, and these from -pth- and -kth- *e.g.* ἐφυλάχτηκα from ἐφυλάχθην.

Original -pt- and -kt- have likewise changed to -ft- and -χt- *e.g.* ἐφτά from ἐπτά, and ὀχτώ from ὀκτώ.¹

The present indicative τίκτω is supposed to have arisen from *τίτκω the reduplicative present to ἔτεκον, τέτοκα (*cf.* γίγνομαι, ἐγενόμην, γέγονα) in which the rare cluster -tk- was modified to -kt- (*cf.* δάκτυλος < *δάτκυλος).

Ad b-2: -p-, -ph-, -b- are dropped before -m-: τρίβω: τέτριμμα [tétrime];

-t-, -th-, -d- are replaced by σ [s] or [z] before -m-: πείθω—πέπεισμαι;

-ph-, -b- and -kh-, -g- are replaced resp. by -p- and -k- before -s-: γράφω—γέγραψαι.

Original -bn- is supposed to have been replaced by -mn- in ἄμνος, σμνός.

Ad b-3: As to -wb-: βαυβώ, βαυβών, βαυβῶν were probably not Koine-Greek.

Ad c-3: The cluster -ηgm- may have been present in ἐλήλεγμαι (*cf.* ἐλήλεγκται).

4.1.3. *Distribution of Consonants in Initial Position*

a) *Single Consonants:* all consonants except j, w, η.

b) *Clusters of Two Consonants.* Indivisible.²

b-1. Explosive plus explosive: see medial b-1.

b-2. Explosive plus continuant: see medial b-2; besides dl- the following are absent: thm-, tn-, and velar explosive plus -m-.

b-3. Continuant plus explosive: only s- plus unvoiced explosive, and σβ-[zb].

b-4. Continuant plus continuant: only mn- and σμ-[zm] or [sm].

c) *Clusters of Three Consonants.* Indivisible.

Continuant—explosive—continuant: the combinations found consist of s-—unvoiced explosive—l-, -r-, -n-: skl-, spl-, stl-, skr-, sphr-, str-; absent are: *spr- (instead of which sphr- may be considered to occur), *stn- (perhaps because *tn- is likewise absent) and *spn-.

4.1.4. *Remarks. Consonants in Initial Position*

Ad a: j- occurred perhaps in such words as ἱατρός *cf.* Mod. Greek γιατρός [jatrós];

¹ Thumb, *o.c.*, p. 12 and 15.

² Initial clusters are never divisible in Koine Greek.

w- occurred only in Latin names like Οὔεσπασιανός, and in the interjections οὐαί (Apc. VIII 13, *etc.*) and οὐά.

Ad b-1, 2: The following clusters are found in Koine-Greek only in obsolete words: gd- in γδοῦπος, tl- in τλᾶν, phn- in the interjection φνεί, dn- in δνόφος, dm- in δμωή.

Ad b-2: gl- in γλυκός has probably been substituted for the un-abmitted dl-: *δλυκός *cf.* Latin *dulcis*; mn- in μνᾶσθαι has been substituted for bn-: *bna = "woman" (*cf.* Boeotian βανά).

Ad c: skr- is found only in words of Latin origin: σκρίνιον, σκρείβας.

4.1.5. *Distribution of Consonants. Final Position*

a) *Single Consonants:* -k (-g), -p, -t, -n (-m, -ŋ), -l, -r, -s (-z), -w, -j.

b) *Clusters of Two Consonants;* the second consonant is always -s.

b-1. Indivisible or Divisible Clusters: explosive plus continuant (*cf.* medial b-2): -ks, -ps. These clusters are usually divisible: indivisible only in έξ, ξξ and interjections like πᾶξ.

b-2. Divisible only: continuant plus continuant (*cf.* medial b-4): -js, -ws, -ls, -ns.

c) *Clusters of Three Consonants:* The last two consonants are always -ps, -ks (*cf.* final b-1). Divisible only: continuant—explosive—continuant: -lks, -rks, -ŋks, -wks, -mps, -jps.

4.1.6. *Remarks. Consonants in Final Position*

Ad a: -k occurs only in οὐκ and έκ, both of which occur under specific circumstances: οὐκ if the following word in the sentence has an initial vowel, έκ before words with initial consonant. Before b-, g-, d-, l-, m-, n-, z- one may incidentally find έγ, which proves that it was in these positions pronounced [εg].

-p and -t are found only in apocopated prepositions: ἀπ', μετ', *etc.*

-m and -ŋ are found in such incidental spellings as έμ Περγάμωι, τῶγ κατᾶ,¹ which were otherwise suppressed by the traditional orthography; the same holds good of -z which may have been present where -ς was followed by a voiced consonant *e.g.* εις βιβλίον [iz biblîon]; Schwyzer mentions only hoiζ δε.²

-l occurs only in λαλ, a name of the letter λ in Egypt,³ in ζαλ a rarity mentioned by Hesychius meaning "much, big" (incorrectly separated from ζάλευκος?) and in ᾶλλ' the apocopated form of ᾶλλᾶ before vowels.

¹ Schweizer, *Perg. Inschr.*, p. 135-136; Hiller v.G., *o.c.*, p. 258.

² Schwyzer, *o.c.*, I, p. 217.

³ P. Lond. 3, 909 a 7 (II A.D.); *cf.* ⲗⲁⲣⲗⲁ the Coptic name of the λ.

As the final explosives appear only under special syntactical circumstances there occur strictly speaking in the final position continuants only.

Ad b: -ns only in ἔλμινς (also in πείρινς, but this word is not Koine-Greek).

-ls only in ἄλς “salt” which tended to give way to the neuter ἄλας.

-mph did no longer occur in non-literary Koine-Greek because ἀμφὶ and consequently ἀμφ’ had become obsolete: they are absent from the LXX, the N.T. and the Apostolic Fathers.

Ad c: -lks occurs only in three words: ἄλξ (*var.* ἄλαξ), ἰῶλξ, ὠλξ; the latter two have been inferred from the accusatives ἰῶλκα, ὠλκα both: “furrow”; -wks is known only from γλαῦξ “owl”, and δαύξ of uncertain meaning.

-jps occurs only in σκολίψ “itch”, -mps only in χρέμψ (*var.* χρέψ), the name of a fish.

In conclusion we may say then that in final position the more frequent triple clusters were -rks and -ηks.

4.1.7. *Consonant Clusters occurring at Junctures in Compounds*
These clusters always occur in a medial position, consisting as they do of the finally admitted single consonants (-g, -k, -m, -n, -η, -s, -z, -r, -w) combined with the initially occurring single consonants or clusters of two or three consonants. The combination of both kinds of consonants is subjected to the following restrictions:

-g and -z occur only in combination with voiced explosives, -k and -t only with voiceless explosives;

-n occurs only with dental explosives, s- and z-, while -m and -η are combined only with resp. labial and velar explosives;

it is doubtful whether -k occurred in combination with l-, m-, n-, z-, or was there replaced by its voiced counterpart -g; the traditional orthography has -κμ-, -κλ-, etc.

The actually occurring clusters are:

Clusters of Two Consonants: -g, -k, -m, -n, -η, -s, -z, -r, -w combined with all consonants except w-, η- and perhaps j- (*par.* 4.1.4).

Clusters of Three Consonants: -g, -k, -m, -n, -η, -s, -z, -r, -w combined with resp. bd-, gd-, pt-, kt-, pth-, kth-, one of the 33 initial clusters consisting of explosive plus continuant (see *par.* 4.1.1), or st-, sth-, zb-, zm-, mn-.

Clusters of Four Consonants: -k, -n, -r, -w combined with spl-, stl-, skl-, sphr-, str-, skr-, skn-.

Besides these four-consonant-clusters the following are characteristic of compounds and cannot occur in non-compounds:

- a) (velar) explosive—(labial) explosive—(dental) explosive
- b) velar explosive—labial explosive—(continuant)
- c) velar explosive—dental explosive—l/m/n, and -gdr-
- d) -w- —labial explosive—(continuant or dental explosive)
- e) velar explosive—s/z—explosive, and in Classical Greek -ksm-
- f) -s/z—velar/labial explosive—dental explosive
- g) -r—labial or velar explosive—r
- h) -s—labial explosive—continuant
- i) -z—voiced explosive—continuant
- j) -r/n—s/z—explosive
- k) -zd-, -gz-, -nz-, -rz-, -rl-, -sl-, -sr-, -sn-.

Remark. Clusters characteristic of non-compounds, that is properly: which do not occur at junctures in compounds, are those of which the first consonant is respectively -l-, -p-, -kh-, -ph-, or -th-. In general it can therefore not be said that clusters which *do* occur at junctures would be subjected to *less* restrictions than the clusters occurring in non-compounds. There is no quantitative relation between the two kinds: they are just different.

4.1.8. *Distribution and Variants.* We have seen that the consonants do not occur in all positions nor in any conceivable combination. Whenever two consonants are distributed in such a way, that in surroundings where one of them occurs the other is never found and conversely, they are in “complementary distribution”. If this complementarity is absolute *i.e.* if the two are phonetically similar, are nowhere opposed to one another, and do not serve to distinguish different words, they may be seen as constituting one phoneme. Complementarity is often restricted to special circumstances, for instance to the position immediately before specific consonants. Such a case is the opposition between [m] and [n], which is word distinctive in the initial position and intervocally *e.g.* in *μόνος* vs. *νόμος*. Before explosives, however, they are in complementary distribution: [m] only before, [b, p, ph], [n] only before [d, t, th], while both are excluded from the position before velar explosives, where only γ[ŋ] is found. In Koine-Greek we find the following cases of complementarity:

4.1.8.1. Labial explosives before dental explosives and [s]:

[p] before [t, th, s] only, written: πτ, φθ, ψ; [b] before [d] only.

4.1.8.2. Velar explosives before dental explosives and [s, z]:

[k] before [t, th, s] only, written: κτ, χθ, ξ; [g] before [d] and [z] only, e.g. in ἐκζητεῖν

Remarks ad 4.1.8.1-2: Before [m] and [n] the labial explosives are replaced by [m], and the velar explosives by γ i.e. phonetically [g], or perhaps [ŋ] as appears from the name *agma* (ἄγμα) of this η-sound, which makes sense only if ἄγμα was pronounced [aŋma]. According to the traditional orthography this replacement was regular only in some categories, namely in the perfective verbs ending in -μαι, -μην, -μεν, -μεθα, -μένος, and in the transpositions in -μα, -μός, -μή.

Elsewhere, however, we find κ and χ e.g. in ἀκμή, συγχός, and since we have also ηχμασαν for ἥχμασαν in Apc.-A XIV 18, and on the other hand διγνυοντος for δεικνύοντος in Apc.-A XXII 8, we do not know to what extent spellings like κμ and χμ were traditional only, and represented perhaps [gm] or even [ŋm].

4.1.8.3. *Dental explosives, [s] and [z] before dental explosives and continuants.* Dental explosives are replaced by σ [s] before [t] and [th], and by σ[z] before [m] e.g. πείθω—πέπεισται, πέπεισθε, πέπεισμαι, but regularly only in the middle perfectives and in the transpositional categories in -μα, -μός, and -μή; elsewhere: ἀτμός, ῥυθμός, φράδμων. Before labial and velar explosives and before [s] they are non-occurrent or dropped e.g.* τίτκω > τίκτω, πείθω—ἔπεισα, παιδός, παιδί etc., but παῖς, παισίν; sequences of letters indicating dental explosives represent one phoneme each: δδ[d], ττ[t], τθ[th]; before [n, l, r] there is no replacement: φάτνη, ἄθλον, ὄλεθρος.

The sibilants [s] and [z] are complementary: [s] before unvoiced explosives and [r]; [z] before voiced explosives, [m] and probably also before [n] and [l]; the replacement of ζ by σ before [m] is only orthographical: ἔκτισμαι [éktizme].

4.1.8.4. *Nasals [m, n, ŋ]:*

[m] only before labial explosives and [n], μμ being equivalent to μ, both: [m];

[n] only before dental explosives and [s, z, r, l], and dropped before [m];

[ŋ] only before velar explosives.

In Classical Attic [n] was replaced by σ in the middle perfectives before -μαι, etc., and in the transpositions in -μα, -μός, -μή, e.g. πέφασμαι, but in Koine-Greek we find πέφαμμαι [péphame].

Remarks: We have mentioned the possibility that the γ occurring as a combinatory variant of κ or χ before μ and ν may also have had

the value [ŋ]. Since [m] may also occur before [n] there might arise an opposition [m] *vs.* [ŋ], but the only instance that we know of is ἀγνός—ἀμνός: [aɣnós]—[amnós]. This doubtful pair would furnish then the only argument for considering ŋ as a separate phoneme by the side of /n/ and /m/.¹

4.1.8.5. [j] and [w] occur only after vowels, not after consonants;

[j] occurred only after [o] in οἰ, and probably also after [ü] in υἰ in the fem. perfect participles in -κυῖα *etc.*; the genitive and dative sg. of these participles changed in the Hellenistic period from -κυίας, -κυῖα to -κυίης, -κυίῃ on the analogy of words ending in consonant plus α. In ἀλληλοῦῖα (*e.g.* Apc. XIX, 1) the ι represents the Hebrew [j]; this would be the only instance of ουι [uj], but the diaeresis may indicate that the scribe correctly considered this exclamation as two words.

[w] occurred after [a, ε, e] in αῠ, εῠ, ηῠ; it is difficult to say whether it occurred in such words as στοά between ο and α, or in πέρυος between υ and ο. It is also conceivable that there was here an intervocalic glottal stop. As far as we can judge [j] and [w] were wholly in complementary distribution, but because of their phonetic dissimilarity they can be considered as separate phonemes only.

4.1.9. *The System of the Consonant Phonemes.* In the initial and final positions the number of different single consonants that may there occur is restricted as compared with those found in the medial positions. By complementary distribution the number of consonants in clusters is still more restricted. Consequently an inventory of the consonant phonemes of Koine-Greek can best list those that occur single and in medial position.

			bilabial/ labiodental	velar/ palatal	alveolar/ dental
explosive	aspirated		/ph/	/kh/	/th/
	non- aspirated	unvoiced voiced	/p/ /b/	/k/ /g/	/t/ /d/
non- explosive	non- fricative	nasal non-nasal	/m/ /w/	/j/	/n/ /l/
	fricative	unvoiced voiced			/s/ /z/
	vibrating				/r/

¹ Cf. B. E. Newton, *Patterns of Sound Change in Greek*, *Lingua* XII, 1963, p. 151 ss.

The heading of “voiced non-aspirated explosive” may include voiced fricative variants (*cf. parr.* 3.4.3-4), and covers therefore explosives and non-explosives.

4.2. Vowels

4.2.1. Distribution of the Vowel Sounds

a) All the *single vowel sounds* can figure with or without the accent at the beginning of a word (before a consonant), in the middle (between consonants), or at the end (after a consonant). Their occurrence is independent of the consonantal surrounding except that:

only [a, ε, e] can precede [w]; only [o, ü] can precede [j];

[u] cannot be followed by nasal plus explosive: -ουνδ-, -ουγκ- occur only in loan words *e.g.* οὐγκία: Latin *uncia*.

b) *Sequences of two vowel sounds*. Initially some combinations do not occur, namely

- (1) [u] plus vowel, except in the interjections οὐαί (Apc. VIII 13, *etc.*) and οὐά, but they may have been [we] and [wa] resp.;
- (2) two identical vowels: [aa-] and [εε-] are obsolete in Koine-Greek, but are found in Homer; [ii-] only in ἰῖζειν “to be like rust”, [oo-] only in ὄον [óon] “egg”, [üü-] only in ὠῶζειν “to hoot like an owl”.

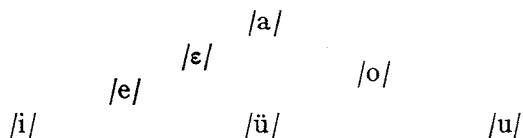
Medially and finally there seems to have been some objection against [ü] as the second of two vowels. Rare instances are: the adjective παῦ(ς), and the perhaps onomatopoetic bird names κῆϋξ “tern, sea swallow” and πῶϋξ (*v.l.* φ-, θ-) “heron”.¹ Initially, however, we find *e.g.* ἀῦπνεῖν, ἀῦδρία, *etc.* After the change of [oj] to [ü] there must have arisen more instances in non-initial positions *e.g.* ζῳοῖς [zōüs]

c) *Sequences of three vowels* are found for instance in words that belong to the categories characterized by -ιος or -ία *e.g.* λυχνουαῖα, δυσφυαῖα. As far as we know the second vowel of a trio is always [i] except in κῆϋος.

d) *Sequences of four vowels* are rare: P. Cairo. Zen. 61,3 χοῖεῖος may have been [khoi-íos] or [khoíos], as successions of identical vowels were sometimes simplified: Apc. XVI 6 Α πειν, C πιν [pin], both for πειν [piín].

¹ According to D'Arcy W. Thompson the former is a ‘vague, poetic, and even legendary word’ (*A Glossary of Greek Birds*, Hildesheim, 1966, p. 134); the usual word was καῦαξ.

4.2.2. *Vowel Phonemes.* The vowel phonemes were: /a/, /ε/, /e/, /i/, /o/, /ü/, /u/. It is very difficult to classify vowels according to acoustic criteria. The traditional triangle (based on opening and rounding) would be as follows:



Symmetry was established when η[e] became [i] c. 150 A.D.¹

4.3. *Restrictions to the Combination of Consonants and Vowels*

In the sequence consonant—vowel—consonant (CVC) the two C's cannot be *identical* aspirated explosives. Such formations as *φεφίληκα, *έθέθην, *λούθηθι, which one would expect on the ground of the morphological procedures underlying πεπαίδευκα, έπαιδεύθην, άγγέλθι, are not tolerated, and substituted resp. by πεφίληκα, έτέθην, and λούθητι. Two *different* aspirated explosives are, however, admitted in the sequence CVC, for instance in έχύθην, άφέθην, (but θάπτω: έτάφην and ένθαφείς); if they are separated by *two* vowels, two θ's, φ's or χ's may occur in the same word, e.g. in θαθηγναι (CVVC-).

The traditional term of "*Hauchdissimilation*" by which this phenomenon is denoted, is too wide and therefore only partially correct, just as Nida's remark: "... a survey of Greek soon reveals that there are no sequences of aspirated consonants in successive syllables".² Moreover, the rule does not seem to apply to compounds of άμφι- and an element with initial φ-, such as άμφιφανής, άμφιφέρομαι, and the well-known άμφιφορεύς. Note, however, that compounds with άμφι- and also the preposition άμφι were disappearing in the Hellenistic period; in the New Testament and the Apostolic Fathers only six of them are found but none with following φ-; the word άμφιφορεύς was replaced by άμφορεύς as early as the Vth century B.C.

¹ For the development in Attica proper see: M. Sánchez Ruipérez, *Esquisse d'une histoire structurale du vocalisme attique*, Acta Congressus Madvigiani I, 1958, p. 127 ss.

² E. A. Nida, *Morphology, the Descriptive Analysis of Words*, Ann Arbor, 1956, 4th ed., p. 15.

4.4. *Distribution of the Accent*

Each of the seven vowels can be accented or not. The occurrence of the accent in the word is restricted to the last three vowels reckoned from the end. The only further restriction in Koine Greek is that the third vowel from the end cannot be accented if the last syllable contains η, ου, αυ, ευ, ηυ or οι.

According to the traditional accent notation specific words could have more than one accent, but only so within a sentence containing more than one word. This was the case when a word with antepenult acute (˘--˘) or penult circumflex (˘~˘) was immediately followed by an enclitic *i.e.* a word (or subword) which has usually no accent of its own¹; these enclitics are: τις, τινος *etc.*, που, ποτε, πως, μου, μοι, με, σου *etc.*, γε, τε, εἰμι, ἐστιν, εἰσιν.² The accentuation of a word like διδάσκαλος when followed by an enclitic is noted ὁ διδάσκαλός μου, that of words like δοῦλος as ὁ δοῦλός μου. Judging from the pronunciation of the Modern Greek equivalent ὁ δάσκαλός μου we think it doubtful whether two accents were actually spoken in such cases in the Hellenistic period. For Koine-Greek it is likely that only the second accent mark corresponded with a spoken accent: [o didaskalós mu] and [o dulós mu].

4.5. *Unusual Distribution of Phonemes in Words in the Apc*

Anything that deviates from the distributional rules stated above originates either from foreign or archaistic words. In the Apc. the following Hebrew names and other words are marked in this way as elements that have come into Greek from abroad:

a) *Unadmitted final consonants* (not resulting from apocope or from the fact that a word with a specific initial consonant follows in the sentence): Βαλααμ (II 14), Βαλακ (II 14), Γαδ (VII 5), Γωγ (XX 8), Δα(υει)δ (III 7, *etc.*), Ἰεζαβελ (II 20), Ἰ(ερουσα)λημ (III 12, *etc.*), Ἰ(σρα)ηλ (II 14, *etc.*), Ἰωσηφ (VII 8), Μαγωγ (XX 8), Μιχαηλ (XII 7), Νεφθαλιμ (VII 6).

Names like Σιών (XIV 1), Συμεων (VII 7) could fit in the Greek system but are in their turn marked by their indeclinability.

b) *Unusual medial sequences*: Μωϋσεως (XV 3) is striking by its ωϋ sequence, αλληλουῖα (XIX 1, 3, 4, 6) by -ουῖα, if it is one word at

¹ Schwyzler, *o.c.*, p. 388-389.

² Enclitics are accented *a.o.* when followed by another enclitic *e.g.* τις που. Dissyllabics are accented after paroxytona *e.g.* λόγων τινῶν.

all (*cf. par.* 4.1.8.5); Αβ^αδδων (IX 11) is strange by its geminate δδ, which is seldom in Classical and Koine Greek orthography, the few instances found in the lexica being epical or¹ dialectal elements.

c) *Unadmitted or rare initial phonemes* or sequences of phonemes do not occur in the Apc. with the exception perhaps of [w-] in the interjection and bird's cry ουαι (VIII 13, *etc.*), which may phonetically be [wε] or [uwé]. It is, however, a fact well known from many languages that distributional rules do not apply to interjections, onomatopoeic words and ideophones. To the onomatopoeias birds' names may be reckoned to belong, if they imitate the cry of the bird in question. Possible instances from Greek, marked at the same time by unusual sequences, are: γλαῦξ "owl" being the only instance of -υξ [-wks], κῆῦξ "tern" and πῶυξ (*v.l.* φωυξ, θωυξ) "heron", vowel plus [ü] being rare, Classical Attic ταῦς "peacock", the only instance of medial [-h-] in non-compounds, and ῥυγξ "wry neck" (sequence ῥυ- also in ῥύζειν "to yell" and its transpositions *e.g.* ῥυγμός).

CHAPTER FIVE

MORPHOLOGY-INTRODUCTION

5.1. *Form and Meaning*

By “*morphology*” is understood the descriptive analysis of the systematic correlations of form and meaning that may be present in the vocabulary of a language. Such a correlation may exist between restricted numbers or between whole series of words, which show constant correspondences of form and meaning, as well as form differences that correspond in a systematical way with differences in meaning.

Koine-Greek (like Classical and Modern Greek) is a language in which many of such corresponding series exist. Two examples out of many are:

ἵππος	—	ἵπποι	λούω	—	λούεις
δοῦλος	—	δούλοι	τρέχω	—	τρέχεις
υἱός	—	υἱοί	βάλλω	—	βάλλεις
θεός	—	θεοί	πράσσω	—	πράσσεις
λύκος	—	λύκοι	ἄγω	—	ἄγεις
κύριος	—	κύριοι	θέλω	—	θέλεις
<i>etc.</i>	—	<i>etc.</i>	<i>etc.</i>	—	<i>etc.</i>

An instance of a correlation found in an absolutely restricted number of (7) word pairs is: τριῶν—τριάκοντα, τεσσάρων—τεσσαράκοντα, πέντε—πεντήκοντα, ἕξ—ἑξήκοντα, ἑπτὰ—ἑβδομήκοντα, ὀκτώ—ὀγδοήκοντα, ἑννέα—ἐνενήκοντα.

¹ By “word” is understood with A. Reichling: “a meaningful linguistic unit, completely determined as to the place and order of the constituent phonemes, capable of being isolated and used to refer to things” (Article “De Taal: haar Wetten en haar Wezen” in E.N.S.I.E., vol. II, 1947, p. 39). In this definition “capable of being isolated” means that a word can be used as the only word of a sentence (e.g. “John?”), can be used in different word orders (e.g. “John did.” vs. “Did John?”), and can be separated from neighbouring words (e.g. “John never did.”). Some of the constituent units of a sentence do not have these three characteristics, but can neither be considered as parts of other words: they are something in between, for instance the Greek article: it can be separated: ὁ ἵππος vs. ὁ καλὸς ἵππος, but inversion is impossible: *ἵππος ὁ. Such units do not deserve the name of “word” to the full extent and will be called “*subwords*”, they will be included in the morphological description.

The members of each of these pairs have common elements of form (ἵππο-, δοῦλο-, etc., λού-, τρέχ- etc., τρι-, τεσσαρ-, etc.) and common semantic elements ("horse", "slave", "wash", "run", "three", "four"). The differences in form are correlated with differences in the total meaning of the words, termed "categorical values" or "values" for short (here: "non-plurality" vs. "plurality", "addresser" vs. "addressee" and "numerical value" vs. "to that value").¹ A constant proportionality between two series of words such as ἵππος—ἵπποι etc. is called a "*morphological category*", but this term is also used to refer to each of the word series separately; a restricted proportionality like τριῶν—τριακόντα etc. is called a "*configuration*".²

5.2. Form and Valence

It should be stated expressly that there do also exist systematic differences between series of words that are not or not exclusively correlated with differences in meaning. Two kinds can be distinguished:

5.2.1. The form differences are correlated with differences in syntactical combinability or "*valence*",³ for example in:

ἵππος	—	ἵππου
δοῦλος	—	δούλου
υἱός	—	υἱοῦ
θεός	—	θεοῦ
κύριος	—	κυρίου
λύκος	—	λύκου
etc.	—	etc.

The difference in valence between these two series is traditionally called that of "nominative" vs. "genitive", which among other things implies that the words of the former can be syntactically connected with a (singular) finite verb in an unrestricted way, whereas the words of the latter series can be connected with any substantive case. Although the description of these valences belongs

¹ Cf. A. Reichling, *Verzamelde Studies*, Zwolle 1965, 3rd ed., p. 47.

² For this term see E. M. Uhlenbeck, *Some Further Remarks on Transformational Grammar*, *Lingua* 17, 1967, p. 278. A configuration should not be confused with an unproductive category, cf. *par.* 5.6.

³ Cf. A. W. de Groot, *Structural Linguistics and Word Classes*, *Lingua* I, 1948, p. 442, and E. M. Uhlenbeck, *Traditionele zinsontleding en syntaxis*, *Levende Talen* 193, 1958, p. 25.

to the domain of syntax, we must include the correlated *form* differences in our morphological discussion, because in Greek a category is never correlated with valence *only*: an exception may be the category of the adjectival adverbs in -ως, such as δικαίως, but everywhere else syntactical valence is correlated in combination with categorial value, *e.g.*:

ἕππος	—	ἕπποι
ἕππου	—	ἕππων
ἕπῳ	—	ἕπποις
ἕππον	—	ἕππους

Horizontally the form differences are correlated with a difference in categorial value, *viz.* “singular” *vs.* “plural”. Vertically the form differences are in both series correlated with differences in syntactical valence: “nominative” *vs.* “genitive,” *etc.* Otherwise stated:

ἕππος differs from ἕπποι in categorial value,
 ἕππος differs from ἕππου, ἕπῳ, ἕππον in syntactical valence,
 ἕππος differs from ἕππων, ἕπποις, ἕππους in value and valence.

5.2.2. Second there are form differences that are correlated with differences in *morphological valence e.g.*

λίθος, λίθου, <i>etc.</i>	—	λιθάζειν, <i>etc.</i>
θύννος, θύννου, <i>etc.</i>	—	θυρνάζειν, <i>etc.</i>
θεός, θεοῦ, <i>etc.</i>	—	θεάζειν, <i>etc.</i>
<i>etc.</i>	—	<i>etc.</i>

It is the presence of the element -αζ- in the third series which is correlated with the transition or transposition of the stem λιθ(ο)- from the substantive system to the system of the verb, *i.e.* not only to the category of the durative infinitive, but to all the other verb categories as well. Some transpositional categories, however, transpose to only *one* category of another system *e.g.* the one that transposes from the verb system to the category which is traditionally called “adverbial”:

κρύπτειν	—	κρύβδην
κλέπτειν	—	κλέβδην
πλέκτειν	—	πλέγδην

the words in -δην having exactly the same syntactical valence as δικαίως, σωφρόνως, *etc.*

The transpositional categories, too, may be correlated with differences in categorial value *e.g.* the transposition from verb to masculine substantive, which is correlated with the element -τη-, is at the same time combined with the categorial value of actor *i.e.* the person doing (resp. whose profession is) the activity implied by the verb:

δικάζειν	—	δικαστής
σαλπίζειν	—	σαλπιστής
ποιεῖν	—	ποιητής
<i>etc.</i>	—	<i>etc.</i>

In the present study the numerous transpositional categories of Koine Greek will not be discussed. As far as we can see such a discussion would not add anything essential, since the Apocalypse of St. John does not contain any peculiarities in this respect or any new transpositional formations. Moreover, the transpositional categories actually represented in the book are only a small part of the total number. For a description of these we would have to draw so heavily upon material from outside that it cannot be considered to lie within the scope of our thesis. The same holds good of the different categories of composition, whether transpositional like μελλοπρύτανις (verb plus substantive to substantive system: “future prytanis, pr. designate”), or not *e.g.* ἱπποπόταμος, and also of the non-transpositional derivations like γλωσσίς “inflammation of the tongue” (γλῶσσα), κεφαλίς “capital of a column” (κεφαλή), κεραμῖς “jar” (κέραμος). For a survey of these latter categories we refer to L. R. Palmer’s *Grammar of the Post-Ptolemaic Papyri*.¹

5.3. *Morphonological Form Differences*

These form-differences occur in combination with the kinds discussed so-far, but are distinct from them by not being correlated either with differences in value or with differences in syntactical valence. They arise from the restrictions set to the combinability of phonemes within the word, which we have listed above in the chapter on phonology.

The most important instance of this kind of form-difference is to be found in the formation of the perfective verb tenses. As is well known the main form difference between the perfective and non-

¹ London 1948.

perfective tenses of verbs with initial consonant consists in the so-called reduplication syllable, which is made up of the initial consonant of the non-perfective basis followed by the phoneme /ε/:

non-perfective	perfective
λούομαι	λέλουμαι
παιδεύομαι	πεπαιδεύμαι
τιμῶμαι	τετίμημαι
<i>etc.</i>	<i>etc.</i>

The familiar phenomenon, however, that the non-perfective verbs with initial θ-, φ-, χ- have perfective counterparts with initial syllables τε-, πε-, κε- instead of *θε-, *φε-, *χε-, is a complication of a morphonological character, caused by the restriction that in non-compounds a sequence of two single identical aspirates separated by one vowel is not allowed (*cf. par. 4.3*).

A second instance is the shift of accent in the paradigm of ἀγγελος: ἀγγελε, ἀγγελος, ἀγγελον, but ἀγγέλου, ἀγγέλους, which arises from the restriction that the antepenult accent is incompatible with /u/ in the final syllable.

5.4. *The Description of the Systematic Form Differences*

There have been developed several techniques and methods for the analysis of systematic form differences: the I-A method (from: item and arrangement), the I-P method (from: item and process) and the W-P method (from: word paradigm). It is not the place here to discuss these methods and their advantages and disadvantages. For discussion we refer to the articles written by Hockett, Robins and Dik, and to the introductory chapter on morphology found in Schultink's dissertation.¹

The method which we follow is a combination of the principles and insights that have been displayed in Uhlenbeck's articles on Javanese morphology and the classical arrangement in paradigms.²

¹ Ch. F. Hockett, *Two Models of Grammatical Description*, Word X, 1954, p. 210 ss. R. H. Robins, *In Defence of WP*, Transact. Philol. Soc. 1959, Oxford 1960, p. 116 ss. S. C. Dik, *Some Critical Remarks on the Treatment of Morphological Structure in Transformational Generative Grammar*, Lingua XVIII 1967, p. 352 ss. H. Schultink, *De morfologische valentie van het ongelede adjectief in Modern Nederlands*, The Hague 1962.

² E. M. Uhlenbeck, *The Study of Word Classes in Javanese*, Lingua III 1953, p. 322 ss., and *Verb Structure in Javanese*, in *For Roman Jakobson*, The Hague 1956, p. 567 ss. and S. C. Dik, see preceding note.

The most important view is the rejection of the preconceived idea that form differences between word series *should* be described by some procedure of segmentation, by dividing the words into parts, namely parts that are common to both series, and those that are not.

Of course there may be languages of which the morphology as a whole can be described by such a procedure, and in Koine Greek, too, there are categories that can be analysed in this way *e.g.* πίτυς, πίτυος, πίτυν as πίτυ-ς, πίτυ-ος, πίτυ-ν. There are, however, form differences that cannot be adequately described by merely dividing the words into parts, one of the most illustrative instances being the description of the reduplication characteristic of the perfective verb tenses. A word like λέλουκας as opposed to λούεις, έλουες, έλουσας *etc.* may seem to fall apart into λέ-λου-κα-ς, but such a division does not describe the principle which underlies the form differences between the series λέλουκας, πέπεικας, κέκρικας *etc.*, *etc.*, on the one hand and *e.g.* λούεις, πείθεις, κρίνεις, *etc.* on the other. Such a case we prefer to describe by saying that the perfective stem has an extra prefixed syllable in opposition to the non-perfective stem, which consists of the first consonant of the non-perfective stem followed by the vowel /ε/ (leaving aside for the moment the complications furnished by θ, φ, ζ, ρ and the element -κα). Our purpose being the simplest description of systematic form differences, differences which vary in nature and complexity, the descriptive method should right from the start be as elastic as possible.

This means that it depends on the categories themselves which is the best way of describing them, and that the procedure of segmentation is only one of the available methods. A second implication is that it is the linguist's liberty to choose the starting point which in the specific situation yields the simplest description. For instance, the nom. sg. παῖς and the dat. pl. παισίν are more easily described on the basis of the other cases παιδί, παῖδα, *etc.*, than vice versa; on the other hand the nom. sg. βασιλεύς and the dat. pl. βασιλεῦσιν are difficult to describe if one starts from βασιλεῖ, βασιλέα, *etc.*; in this class it is the former that provide us with a better starting point for describing the latter.

As we have to do in Greek with series of words that are not opposed to one, but to several series of words at the time, it is quite an advantage to represent such complex systems by the traditional paradigmatic scheme *i.e.* a list of words of which each exemplifies a whole series. For instance, in the paradigms of the case-number

categories *κόραξ*, *πίτυς*, and *γένεσις* below we have in each case some kind of short hand for writing nine series of words by each other's side. It stands to reason that only a phonematic notation may show what the form differences really were in the Hellenistic period:

voc.sg.	{	<i>κόραξ</i>	[kóraks]	<i>πίτυ</i>	[pítü]	<i>γένεσι</i>	[génesi]
nom.sg.				<i>πίτυς</i>	[pítüs]	<i>γένεσις</i>	[génesis]
gen.sg.		<i>κόρακος</i>	[kórakos]	<i>πίτυος</i>	[pítüos]	<i>γενέσεως</i>	[genéseos]
dat.sg.		<i>κόρακι</i>	[kóraki]	<i>πίτυι</i>	[pítüi]	<i>γενέσει</i>	[genési]
acc.sg.		<i>κόρακα</i>	[kóraka]	<i>πίτυν</i>	[pítün]	<i>γένεσιν</i>	[génésin]
nom.pl.		<i>κόρακες</i>	[kórakes]	<i>πίτυες</i>	[pítües]	<i>γενέσεις</i>	[genésis]
gen.pl.		<i>κοράκων</i>	[korákon]	<i>πιτύων</i>	[pitüon]	<i>γενέσεων</i>	[genéseon]
dat.pl.		<i>κόραξιν</i>	[kóraksin]	<i>πίτυσιν</i>	[pítüsin]	<i>γενέσεσιν</i>	[genésésin]
acc.pl.		<i>κόρακας</i>	[kórakas]	<i>πίτυας</i>	[pítüas]	<i>γενέσεις</i>	[genésis]

These three paradigms are exact parallels from the semantic and syntactical points of view: there is a complete proportionality between the successive lines *e.g.* *κόρακι: πίτυι: γενέσει = κόρακα: πίτυν: γένεσιν = etc. etc.* The description of those categories of which the forms fall apart into such form classes, presents extra difficulties. Here again one has to make a choice from several methods of describing such parallel form-differences which we shall briefly discuss, namely methods a), b) and c).

a) The form differences within each of these paradigms can easily be described on the basis of the form element which is common to the eight or nine words of which it consists. The remaining elements, the "affixes", are then identical to the form differences as such. The common elements are resp.: [kórak-], [pítü-], [genes-], and will be indicated by symbol "B"(-asis). The accent is antepenult, except where penult accent is specially indicated (by "p"), or necessitated by the presence of only two syllables (symbol: "2").

.....	B --- (2)	B [-i]
B [-s] (2)	B [-s] (2)	B [-is]
B [-os]	B [-os]	B [-eos]
B [-i]	B [-i]	B [-i] (p)
B [-a]	B [-n] (2)	B [-in]
B [-es]	B [-es]	B [-is] (p)
B [-on] (p)	B [-on] (p)	B [-eon]
B [-sin]	B [-sin]	B [-esin]
B [-as]	B [-as]	B [-is] (p)

If we compare now the paradigms of *κόραξ* and *πίτυς* we see that they are different only in the acc. sg.: B [-a] *vs.* B [-n], and also by the absence *vs.* the presence of a special vocative form. The former difference is easily accounted for by a distributional rule: [-a] if B ends in consonant, [-n] if B ends in [ü]; the absence or presence of the vocative is linked up with the same conditions.

As soon as we compare also the third paradigm some difficulties arise from the fact that it is more different from either the first or the second than these latter differ from one another. The differences between the affixes cannot be accounted for by distributional rules, because [-i], [-is], *etc.*, and [-s], [-eos], *etc.*, are preceded by a consonant, and this consonant may even be the same in both paradigms: *cf.* *θυξ*, *θυυχος* and *ῥάχης*, *ῥάχεως*.

b) A description which would consistently keep the affixes of the different classes as similar as possible would meet with difficulties identical to those arising from method a). For the sake of conciseness we shall not expose these.

c) These difficulties, however, will be overcome as soon as we proceed to set up for the description of *γένεσις* not one but *two* bases: B-1 [genesi] and B-2 [genese]. This will change our description in such a way that the following form parallelisms between the paradigms arise:

[----- : kórak-s : kórak-a = pítü : pítü-s : pítü-n = génesi : génesi-s :
 génesi-n]
 [kórak-os : korák-on : kórak-sin = pítü-os : pítü-on : pítü-sin =
 genése-os : genése-on : genése-sin]

The exception is here the accent of [genése-on] which does not match with that of [korák-on] and [pítü-on].

This procedure, which combines methods a) and b), enables us also to include the *γένεσις* paradigm in the above rule of distribution except for the dat. sg. *genési*. (II) and the nom./acc. pl. *genési-s* (II) which remain deviating:

consonant basis: no vocative (except *γύναι*); acc. sg. in [-a];
 [ü]- and [i/ε]- basis: vocative (identical with one of the bases);
 acc. sg. [-n].

Now we have accepted these variant-bases B-1 and B-2 we must also define under what circumstances they occur. Their distribution appears to be:

B-1: plus single consonant [-s, -n] or zero (vocative);

B-2: plus syllable [-os, -on, -sin].

An additional advantage of the procedure is that the total number of different form elements involved in the description of these three paradigms has become somewhat lower: it amounts now to 16 (four bases, twelve other elements), otherwise it would amount to 21 (three bases, 18 further elements).

Such variant-bases as we have set up must not be considered as form differences that are not correlated with the differences in value or valence. We will demonstrate this fact by an instance taken from the verb class of *παιδεύεις*. To achieve symmetry in the description of this class in comparison with the other verb classes (*νικᾷς*, *φιλεῖς*, *δουλοῖς*) we shall have to set up at least two variant bases: B-1 *παιδεύο* and B-2 *παιδεύε*, resp. found in *παιδεύομεν*, *ἐπαιδεύοντο*, etc. and in *παιδεύετε*, *ἐπαίδευες*, etc. Now it so happens that the third person sg. and pl. of the active imperfect *ἐπαίδευεν* and *ἐπαίδευον*, are different only by -ε- vs. -ο-, and that both these vowels are part of the variant-bases. The form difference between the two categories is in this case described in the bases themselves: B-1 [-n] vs. B-2 [-n], but there are within the paradigm of *παιδεύεις* oppositions in which the difference “[-n] vs. some other form element” does play a rôle as well e.g. *ἐπαίδευον*—*ἐπαίδευες* i.e. B-1 [-n] vs. B-2 [-s].

The description of the accent. Whenever the accent remains on the same vowel within a paradigm the easiest way to account for it is to include it in the descriptonal basis. If there are only one or two shifts of accent, as in the paradigm of *πίτυς*, the accent of the majority of the words constituting the paradigm can still be included in the descriptonal basis, and the differences from this accentuation may then be specially mentioned.

On the other hand, when the accent rests in a paradigm on the same place in the words as counted from the end, it is simpler to say that the accent is for instance “antepenult”. Such a formulation covers then the seeming shifts of accent in the paradigm of *γένεσις*: *γένεσι*, *γένεσιν*, *γενέσεως*, *γενέσεσιν*. In this particular instance, however, it is also possible to include the accent in the variant bases: B-1 [*génési*] and B-2 [*genése*], because the occurrence of B-2 coincides with the condition under which the accent shift takes place, namely with the occurrence of an affix containing a vowel [-os, -on,

-sin]. In either case special mention must be made of the deviating accent in γενέσει [genési] and γενέσεις [genésis]. A more obvious instance is the verb paradigm of παιδεύω. Here it is undoubtedly the simpler procedure to state in a general rule that the accent is antepenult unless indicated otherwise: παιδεύομεν, παιδεύομεθα, ἐπαίδευον, ἐπαίδευοντο, but for instance παιδεύου, ἐπαιδεύου, παιδεύετω.

Syncretism. A further problem is furnished by the fact that form distinctions present in class 1 may be represented by just one form in class 2. A well known example of this phenomenon is the Latin opposition between gen. sg. and dat. sg., for instance *lupī* vs. *lupo*, which is represented in the declension of *rosa* by *rosae* vs. *rosae*, that is, by no form difference at all. Wherever it may be clear that we have in such cases to do with one word we shall label it by a common denominator *e.g.* φύλαξ voc.-nom. sg., and have to investigate if the oppositions within the paradigm to which it belongs are different from those present in a paradigm which contains a separate vocative and nominative. If, however, the word unity is doubtful, we shall separate the different functions or values of such a form by a stroke *e.g.* δῶρον voc.-nom./acc. sg.

5.5. *The Description of the Categorical Values*

Jakobson, and more recently, Greenberg have shown the importance of the distinction between "marked" and "unmarked" categories,¹ a distinction, which has already been carried through in a number of more recent descriptions of European and non-European languages, such as Classical Greek, Hungarian and Javanese.² It implies that in describing the semantic differences between two opposed series of words one can usually consider either of the values as positive *i.e.* positively expressing a certain notion, whereas the opposed value is neutral *i.e.* expressing indifference with regard to the positive value of the other category. In practice this means that according to context the value of the unmarked member may imply the absence of the notion expressed by the positive value, or express a notion which does not exclude that of

¹ R. Jakobson, *Signe zéro*, in *Mélanges de linguistique offerts à Charles Bally*, Geneva 1939, p. 143 ss. J. H. Greenberg, *Language Universals in Current Trends in Linguistics III*, The Hague-Paris 1966, pp. 61-112.

² M. S. Ruipérez, *Estructura del sistema de aspectos y tiempos del verbo griego antiguo*, Salamanca 1954. J. Lotz, *The Semantic Analysis of the Nominal Bases in Hungarian*, T.C.L.C. V 1949, p. 185 ss. E. M. Uhlenbeck, *Verb Structure in Javanese* in *For Roman Jakobson*, The Hague 1956, p. 567 ss.

the positive value. Semantic oppositions, therefore, are not polar, not like “X vs. Y” which are then exclusive of one another, but rather like “X vs. O” *i.e.* “X vs. (X plus Y)”. An example is furnished by the opposition between the vocative and the nominative *e.g.* δοῦλε vs. δοῦλος, πόλι vs. πόλις, *etc.* Of the vocative the value always implies the addressee, the person spoken to; the value of the nominative, however, is neutral: contextually it may indicate the addressee (nom. “used as a vocative”), or not (nom. used with 3rd p. verb); it is unmarked as opposed to the vocative.

In addition to the above Greenberg enumerates a number of characteristics of the unmarked category, which may or may not appear.¹

a) *Neutralization*. In environments where the opposition between two categories is suppressed, it is the unmarked member which appears. For instance, in Classical Attic the unmarked singular verbs only combine with neuter plurals.

b) The fact that a greater number of distinctions may exist in the unmarked category than in the marked category, where these distinctions are *syncretized*. In the Greek singular substantive, which is unmarked (see *par.* 6.2.1.7), we find the opposition vocative vs. nominative, which is always syncretized in the plural.

c) *Defectivation*. The unmarked category may have categories that are absent in the marked partner, *e.g.* in the non-perfective tenses of Greek there is an opposition durative vs. aoristic, but not so in the marked perfectives.

d) *Dominance*. The unmarked category may represent the marked one in heterogeneous collections of both, *e.g.* Sanskrit *ahanī* “the two days” *i.e.* “day and night”, οἱ βασιλεῖς “the king and the queen”, and also such cases as Luke II 48 ὁ πατήρ σου καὶ γὼ (Mary) ὀδυνώμενοι (masc.) ζητοῦμέν σε.

e) The higher degree of morphological irregularity in unmarked forms. In Greek the singular declension of ἀμαρτία, θάλασσα and νίκη is each time different, but in the marked plural categories their declension is uniform.

f) *Frequency*. Greenberg shows with a wealth of examples, that in general the unmarked categories are more frequently used than the marked ones. For instance, the statistics for the number categories of the noun in the Rigveda are resp. singular: 70, 3 %, plural

¹ *o.c.*, pp. 72-75. We have substituted Greek examples for Greenberg's instances.

25,1 %, dual: 4,6 %, the size of the sample being over 29.000.¹ Special circumstances may, of course, counteract this general trend; for instance, first person verbs are usually more frequent than second person verbs, but in Vedic Sanskrit the latter are exceptionally frequent, because the texts happen to be odes addressed to divinities.²

Whenever the semantic analysis shows that of two values neither can be considered as the unmarked member, it will be highly probable that we have been dealing up to that point with only part of a greater system of oppositions: the two may be both marked as opposed to a third unmarked category. Where three categories are involved, say A, B, and C, several arrangements of marked (m) and unmarked (u) are possible:

escalated:

m	u	
	m	u
A	B	C

serial:

m	u	m	or:	u	m	u
A	B	C		A	B	C

Finally we should remark that the distinction “marked/unmarked” is not necessarily paralleled on the formal side in such a way, that words belonging to a marked category have extra form as compared with those of the unmarked category. Our example of the Greek vocative and nominative shows this most clearly: although the vocative is marked it may have “less form” than the nominative: e.g. πόλι — πόλις, πίτυ — πίτυς

5.6. Productivity

In a complete description of the morphological categories it should also be stated which categories are productive and which are not. Let us consider the following two categories:

a) ἐπαίδευσ <u>α</u> — ἐπαίδευσ <u>ον</u> ἐλου <u>σα</u> — ἐλου <u>ον</u>	b) ἔδα <u>χον</u> — ἔδα <u>κνον</u> ἐπι <u>ον</u> — ἐπι <u>ινον</u>
--	--

¹ o.c., p. 76.

² o.c., p. 85.

a) ἐνίκησα — ἐνίκων	b) ἔτεμον — ἔτεμνον
ἐδούλωσα — ἐδούλουν	ἔκαμον — ἔκαμνον
ἐφίλησα — ἐφίλουν	
etc. etc.	

The semantic differences between the pairs of a) and b) are exact parallels: the form differences, resp. "presence of -σα" vs. "absence of -σα", and "absence of -ν-" vs. "presence of -ν-" are correlated in both categories with the same difference in value: "aoristic" vs. "durative".

The fundamental difference, however, between the two is not formal, but is constituted by the fact that the former can be multiplied in an almost unrestricted way,¹ whereas the latter cannot. The words belonging to b) can be counted exactly: they amount to four, compounds not included. The underlying morphological procedure can hardly be applied outside the registered instances and for this reason such a category is called *unproductive*. The domains occupied by these categories are as it were prohibited area to the productive ones, which, however, does not mean that their border lines are absolutely fixed. Through the ages the irregular aorists tended to decrease in number by transitions to the productive category: by the side of e.g. ἤμαρτον there arose an aorist ἡμάρτησα (Diodorus Sic. II 14, 4), whereas the reverse happened only seldom: ἀνέθalon (Phil. IV 10) may be an instance by the side of ἀνέθαλα or ἀνέθηλα.² According to Uhlenbeck such an incidental expansion of an unproductive category is no proof that it has all of a sudden become productive.³ When the border lines of unproductive categories are violated the speaker has a special purpose in mind: he may want to lend his words some comic or stylistic tinge.⁴ An expanding category is therefore productive only when the expansion is non-incidental and unintentional.

Special difficulties arise when the language to be described is no longer spoken, because in this case the attitude of the native speakers towards the different categories is unknown. Only the rare

¹ We have left undiscussed the fact that the aorist ends in -α, not in -σα when the verb stem ends in λ, μ, ν, ρ. The small group of ἔδακον is only one kind taken from among the unproductive aorists.

² Cf. Blass-Debrunner, *o.c.*, *par.* 75.

³ E. M. Uhlenbeck, *Lingua* III, *p.* 336.

⁴ H. Schultink, *o.c.*, *p.* 39.

countings that have been made can give us now some impression of the productivity of the categories.¹

As a category consists of two series of words we may raise the question of how many words may constitute a category. The minimal series being two words, the smallest category possible can be considered to contain four words *i.e.* two proportionate pairs. In Koine Greek there are some of such microcategories *e.g.* ἔκ : ἑκτός = ἐν : ἑντός. Whenever such a limited series is not paralleled by a productive counterpart (showing the same semantic opposition correlated with other differences in form) we do not call it a morphological category but a *configuration*. Pairs like νύξ ‘night’ – νύκτωρ ‘at night’ are neither category nor configuration because they lack corresponding pairs. Of course we are aware of the fact that νύξ and νύκτωρ bear a formal and semantic likeness to one another, and must be historically related.

5.7. *Morphological Valence*

Very often a category is part of a greater system of categories, which are opposed to each other in different ways: category 1 may be marked as opposed to category 2, and together they may be marked as opposed to a third category, and so on. Within a system we may expect such cumulations of marked and unmarked. The complete description of a category should state therefore to what greater system it belongs and what place it has within that system. We shall do so by first sketching the systems as a whole and by next discussing the constituent categories. Our provisional impression of the morphology of Koine Greek is that it comprised six of such systems of categories or configurations:

- | | | | |
|-------------|--------------|------------|----------|
| a) ἄγγελος | substantives | d) οὗτος | pronouns |
| b) δίκαιος | adjectives | e) δέκα | numerals |
| c) Φίλιππος | proper names | f) παιδεύω | verbs. |

These systems are not separated from one another by some kind of impenetrable partitions. Incidentally systems d) and e) for instance, contain words that might also be reckoned to system b), but are in reality in between two systems. Moreover, the different systems are

¹ Very useful are in this respect: C. D. Buck-W. Petersen, *A Reverse Index of Greek Nouns and Adjectives*, Chicago 1945, and P. Kretschmer-E. Locker, *Rückläufiges Wörterbuch der griechischen Sprache*, Göttingen 1963, 2nd ed.

interlinked by a whole network of transpositional categories. Some instances of these linking categories are:

to system a): from b): σοφός—σοφία, δίκαιος—δικαιοσύνη
 from e): τρεῖς—τριάς
 from f): κηρύσσω—κήρυγμα, πράσσω—πράξις
 to system b): from a): ψυχή—ψυχικός, σμάραγδος—σμαράγδινο
 from f): πονῶ—πονηρός, ἀγαπῶ—ἀγαπητός
 to the adverbial category of b): from a): ζυγόν—ζυγάδην
 from f): ἐμβαίνω—ἐμβαδόν
 from d/e) *and* a) (compositional):
 αὐτοχειρί, πανοικί
 to system f): from a): ψῆφος—ψηφίζω
 from b): μέγας—μεγαλύνω

As we shall begin each of the following chapters by giving an outline of the morphological system to be described, the morphological valence of each of them is already contained in these preliminary surveys. Nevertheless special paragraphs entitled "morphological valence" will be found where some additional remarks have to be made, for instance on restricted groups of words that take part in more categories than the majority of words of the particular system do. As we have said above, a discussion of the many transpositional and compositional categories will not be given in detail.

5.8. *The Morphology of the Language used in the Apocalypse*

As far as the formal side is concerned there is hardly any difference with contemporary Koine-Greek in or outside the New Testament, provided that in the latter case Atticistic influences are excluded. In our form description we shall therefore not restrict ourselves exclusively to the material actually present in the Apocalypse. For instance, the absence of such personal names as Σωκράτης is a coincidence due to the mainly Semitic background of the New Testament as a whole: there happens to be only one such name in the whole New Testament: Σωθένης (Acts XVIII 17; 1 Cor. I 1). This fact we believe, should not induce us to exclude from our description this whole class of personal names so frequently used outside of Biblical Greek, but of course we shall have to mention their non-occurrence in the Apc.

Likewise the values of the different categories cannot be completely illustrated from instances furnished by the Apc. alone: occasionally we must quote from other N.T. books or even from elsewhere. For instance, the feminine adjective is not used independently (*i.e.* as a substantive) in the Apc., a fact which cannot be considered a peculiarity of the book, as each of the different N.T. writings contains only few instances of it, or none at all. That is the reason why we had to adduce the participle ἡ πιστεύουσα from Luke I 45 in order to demonstrate the specific value of such an adjective, which is not different from that of a participle used as a substantive.

Whenever St. John's morphology is evidently in line with that of the contemporary non-literary language we feel free to make such minor suppletions if they are indispensable to a full description of the phenomena that are present in the Apc., and if it can be made likely that their non-occurrence in this book is accidental.

On the other hand it stands to reason that any category which will be found to have deviating values can be described only by drawing upon the material furnished by the Apc. The verb categories are such a case, as it can be proved that the absence of some of them is certainly not accidental, but a result of the author's bilingualism.

CHAPTER SIX

THE SUBSTANTIVE SYSTEM

6.1. *Introduction and Survey*

The substantive system of Koine-Greek consists of fifteen morphological categories which in their combination are correlated with nine oppositions of a semantic or syntactical character. With the exception of the singularia and pluralia tantum each substantive takes part in three kinds of oppositions at the time, namely in:

- a) the opposition of number: singular *vs.* plural: πίτυ—πίτυες, *etc.*
- b) the opposition of non-diminutives *vs.* diminutives: πίτυ—πιτύδιον, *etc.*
- c) the oppositions of case: voc. *vs.* nom., voc. *vs.* gen., *etc.*: πίτυ—πίτυς, *etc.*

A specific word, for instance the nom. sg. πίτυς, may therefore recur at several points in this chapter, each time to be described for different correlations of form and value or valence. As almost any morphological category has a number of form classes (see *par.* 5. 4), we shall first for the purpose of demonstration try to outline the substantive system as a whole by making use of one sample. Later on we shall deal with these form classes and with further problems of which an earlier discussion would only damage the cohesion of the overall picture. The fifteen substantive categories may be arranged as follows:

		Singular	Plural
non-dim.	voc.	πίτυ	} πίτυες πίτυας πιτύων πίτυσι
	nom.	πίτυς	
	acc.	πίτυν	
	gen.	πίτυος	
	dat.	πίτυι	
diminut.	voc.	} πιτύδιον πιτυδίου πιτυδίῳ	} πιτύδια πιτυδίων πιτυδίοις
	nom.		
	acc.		
	gen.		
	dat.		

We will discuss this system in the order of the headings a), b) and c) above. Within c) one must distinguish between the description of a personal value correlated with the vocative as opposed to the remaining case categories, and the description of the syntactical valences of the cases, which will be treated of as far as they may be considered peculiar to the Apc. (see *par.* 6.2).

6.2. *Categorical Values*

6.2.1. *Values of Number. Traditional Distinctions.* Traditionally the following varieties of singulars and plurals are distinguished:¹

- (1) *Ordinary* sg. and pl. The sg. is said to refer to *one*, the pl. to *more than one* countable thing or person.
- (2) *Generic* sg. representing a whole class by one specimen *e.g.* Rom. I 16 τὸ εὐαγγέλιον· δύναμις γὰρ θεοῦ ἐστὶν παντὶ τῷ πιστεύοντι· Ἰουδαίῳ τε πρῶτον καὶ Ἑλλήνι.
- (3) *Collective* sg. and pl., which are said to refer to a collection rather than to a number of countable things or persons *e.g.* *Iliad* II 11 τερὲν κατὰ δάκρυον εἴβεις;
- (4) *Distributional* sg. referring to each member of a specific group *e.g.* Euripides, *Herc.* 702-703 πέπλοις κοσμεῖσθε σῶμα;
- (5) *Poetical* pl. *e.g.* Euripides, *Phoen.* 1136 ὕδρας ἔχων λαιοῖσιν ἐν βραχίουσιν.

This applies to Adrastus, who being no Indian god has only one left arm: poetical use of the plural instead of the singular.²

To each of these distinctions we shall devote a short discussion.

6.2.1.1. As to the *ordinary* sg. and pl. it may be doubted whether the semantic opposition for instance between ἄνθρωπος and ἄνθρωποι can be described as “one man” vs. “more than one man”, because the singular ἄνθρωπος as such does not mean “one man” but “a man, man” or even “men”. Of course ἄνθρωπος when used in a specific context often refers actually to the one man present in the situation, but it is precisely by information from this context that we know that this is meant and not for instance “man in general”. Compare the ordinary singular in Luke XIII 19 κόκκῳ σινάπεως ὃν λαβὼν ἄνθρωπος (a man, and here *one* only) ἔβαλεν εἰς κῆπον ἑαυτοῦ with the generic sg. in Apc. IV 7 καὶ τὸ τρίτον ζῶον ἔχων τὸ πρόσωπον

¹ *E.g.* Schwyzer, *o.c.*, II, p. 41-46.

² See K. Witte, *Singular und Plural, Forschungen über Form und Geschichte der griechischen Poesie*, Leipsic 1907.

ὡς ἀν(θρώπου) (‘‘a face as of a man’’ or more freely ‘‘as men have’’). A singular word may of course be accompanied by εἷς, μία, *etc.* to indicate explicitly that only one of the kind is meant *e.g.* Apc. XXI 21 ἦν ἐξ ἑνὸς μαργαρίτου ‘‘was made of one pearl’’.¹ On the other hand it is an undoubtable fact that in prose the plural ἄνθρωποι always has the explicit meaning of ‘‘more than one man’’, special words being added if necessary in order to express how many more than one are meant, such as the exact τρεῖς, δέκα, *etc.* or the rather vague πολλοί, ἔνιοι, *etc.*²

6.2.1.2. The *generic* aspect of meaning, sometimes also called *collective* aspect, is not restricted to the singular but occurs likewise with plural nouns, with the article *e.g.* in Apc. IX 6 καὶ ἐν ταῖς ἡμέραις ἐκείναις ζῇ[τῆσου]σιν οἱ ἄν(θρώπ)οι τὸν θάνατον, without it in *e.g.* Apc. IX 7-8 καὶ τὰ πρόσω[πα] αὐτῶν ὡς πρόσωπα ἀν(θρώπ)ων. In the former passage the article refers to a class as far as present in the situation: ‘‘the people then alive’’, in the latter it is absent since the faces were not only like those of the people present in the situation but like those of the people of all times : *cf.* the *anarthrous* ἀνθρώπου in IV 7.

We hold the opinion that the opposition between generic singulars and plurals runs exactly parallel to that between the ordinary singulars and plurals, though we have to admit that with generic words the difference in number may be unclear *e.g.* ἀνατολῆς ‘‘East’’ (Apc. XXI 13) *vs.* ἀνατολῶν ‘‘East’’ (Matt. II 1). As the word ‘‘East’’, which covers only part of the total word meaning of ἀνατολή, cannot be pluralized in English, the semantic opposition can much better be formulated by using one of the other aspects of meaning *e.g.* ‘‘(quarter of) sunset’’ *vs.* ‘‘(quarter of) sunsets’’ or ‘‘rising’’ *vs.* ‘‘risings’’. A generic plural is used when the speaker has the more than one members of the implied class in mind; when he does not give any special thought to this number he uses the singular.³ Consequently the generic use of substantives is not linked with

¹ *E.g.* Blass-Debrunner, *o.c.*, *par.* 139.

² *Cf.* J. Lotz's remarks on the Hungarian plural *az emberek* *vs.* the singular *ember* (‘‘people’’ *vs.* ‘‘man’’) in his article *The semantic Analysis of the nominal Bases in Hungarian*, T.C.L.C. 5, 1949, *p.* 186: in *az emberek* ‘‘individual multiplicity is emphasized’’ in opposition to the general use of *ember*. For the rest the opposition between the Hungarian singular and plural is not comparable to that between the Greek or English *sg.* and *pl.*, because in Hungarian numerals are always used with the singular category.

³ The traditional names ‘‘singularis (numerus)’’, ἐνικός (ἀριθμός) are therefore inadequate.

either of the categories of number nor with the presence or absence of the article. As far as we can see the difference between ordinary and generic use is easily discernible all over the Apc., except in one passage where the choice that the interpreter will make is of some exegetical importance. This is the crucial phrase XIII 18 ἀριθμὸς γὰρ[ρ] ἀν(θρώπ)ου ἐστίν, which if considered to be non-generic means "for it is the number of a (specific) man", if generic however "for it is a number as men have" (cf. XXI 17 μέτρον ἀν(θρώπ)ου; for the absence of the article with ἀριθμὸς see *par.* 9.11.5.2).

6.2.1.3. The term *collective singular* is used with reference to names of materials and liquids like ξύλον, ὕδωρ, and with reference to other cases. In the meaning of such words as ὕδωρ (*e.g.* XII 15) at least two aspects can always be distinguished: a) "water" as an element; b) "water" as a container or quantity of water: "well, river, sea"; with non-liquids this aspect has to be worded as: object fabricated of (the material). The corresponding plurals usually have the second aspect only *e.g.* ὑδάτων in Apc. I 15.¹ In a way it may even be said that ὕδωρ does not have a plural when referring to water as an element only. That is the reason why it is called a collective singular, but a better term might be: *singulare tantum* according to one of the semantic aspects. A typical instance is also the word αἷμα which besides "blood" as a liquid may also have the meaning of "drop of blood" or "case of bloodshed". The latter two aspects may occur in the plural, for instance in Apc. XVIII 24 (Ⲱ); cf. XVII 16 σάρκαϛ αὐτῆϛ "pieces of her flesh" (?), but the word may

¹ A special case is τὰς πῆγας τῶν ὑδάτων *vs.* πῆγας ὑδάτων. In the LXX there is concord between πῆγη and ὕδατος, both in the category of number and in the presence or absence of the article (cf. C. Brockelmann, *Hebräische Syntax*, Neukirchen 1956, *par.* 72a). This concord can also be observed in the few passages in the Apc. where these word groups occur: XXI 6 (both singular and articular, but *ms.* A omits της πηγης); XVI 4 (both plural and articular); VII 17 and XIV 7 (plural, anarthrous). In the original Hebrew the concord of article and number is non-existent, because the first substantive is regularly without the article in such groups, and second because "water" is a *plurale tantum*: מִיָּם. From the LXX it appears, however, that the translators considered the connection between the two substantives to be appositional rather than, for instance, partitive: in Hebrew there is no form difference between appositional word groups and genitive groups, except that in the former congruence of number is observed as far as possible. The group τὰς πῆγας τῶν ὑδάτων has therefore in the strict sense rather the semantic content of "the wells, the waters" than "the wells of water". In XIV 7 τῷ ποιῶσιν τὸν οὐ(ρα)νὸν καὶ τὴν γῆν καὶ θάλασσαν καὶ πῆγας ὑδάτων the article τὴν is possibly to be connected with θάλασσαν and πῆγας as well, and in that case it represents also a τῶν with ὑδάτων.

be a plur. tant. in the Apc. (see also *par.* 6.2.1.4). “Collective singulars” are likewise called such cases as ἄμπελον in Thucydides IV 90 ἄμπελον κόπτοντες τὴν περὶ τὸ ἱερὸν, an instance which illustrates only the semantic latitude of the singular category, which as we have exposed above is indifferent as to number (*par.* 6.2.1.1).

The term “*collective plural*” is sometimes used for those plural substantives that are not accompanied by a numeral indicating the exact quantity.¹ This distinction is of course quite in line with our provisional description of the plural value (*par.* 6.2.1.1), except for the fact that we do not believe, as is it sometimes stated, that such plurals refer to an undivided mass. There does not seem to be much difference here with the instances of the so-called “*augmentative plural*” which is treated by Blass-Debrunner as a “plural instead of the singular” and is supposed to indicate the number of the parts constituting the thing referred to. It may be useful to discuss here some of the examples.²

According to this N.T. grammar the word ἱμάτια indicates the ἱμάτιον and the χιτῶν together, for instance in the Synoptical Passions, but in John XIX 23-24 where an excursus is made on these clothes,³ it so happens that, because in this version of the story the χιτῶν is singled out, the plural ἱμάτια after subtraction of the χιτῶν seems to refer to one ἱμάτιον only and to have a singular value. In our opinion this reasoning cannot be right because of the simple fact that ἱμάτια when it means “clothing” includes besides the ἱμάτιον and the χιτῶν also the ζωνή and the ὑποδήματα. The plural ὀψώνια (e.g. Luke III 14) “wages, rations” as opposed to the singular bearing the same meaning may seem to be a waterproof instance of a *pluralis pro singulari*, but this is true only if the aspect of “wages” is separated from the total word-meaning which includes a.o. “payment to buy food” cf. ὄψον and ὠνεῖσθαι. The opposition may therefore also be formulated as “payment *etc.*” vs. “payments *etc.*”, both used generically (cf. *par.* 6.2.1.2). Schwyzer

¹ Schwyzer, o.c., II p. 43: “eine zwar aus Teilen bestehende, aber als ungliedert aufgefasste Menge”.

² Cf. Blass-Debrunner, o.c.; *par.* 141.

³ This digression owes its existence to St. John's desire to elaborate both the ἱμάτια and the ἱματισμόν, present in his quotation from Psalm XXI (XXII) 19 διεμερίσαντο τὰ ἱμάτιά μου ἑαυτοῖς καὶ ἐπὶ τὸν ἱματισμόν μου ἔβαλον κληῖρον. These words are supposed to predict the acts of the soldiers at the Cross, but in the Psalm there is a poetical reference to one and the same event (parallelismus membrorum).

mentions ὄχλοι, which is so frequent in the Gospels and Acts, as referring to the constituting parts (*i.e.* persons) of a crowd, but the word may quite well refer to the separate groups that followed Jesus.¹ Moulton-Howard mention also such cases as Acts XXI 28 where the Jews say that now even heathens ("Ἕλληνας) are admitted to the Temple because a certain Trophimus has been seen there: *v.* 29 προεωρακότες Τρόφιμον. This "Ἕλληνας, however, does not refer to this person but has a wider scope: it indicates that the class to which this Trophimus belongs is now admitted, which is a conclusion from the fact that one of them has been found in the Temple.²

6.2.1.4. *Distributive* are called those singulars that refer to a thing possessed by each one of a specific group *e.g.* Apoc. V 8 ἔχοντες ἑκάστος κιθάραν (*plur.*: 14 *curs.*, Vulgate, Gigas, *etc.*), VI 11 ἐδόθη αὐτοῖς ἐκάστω στολή (*plur.*: Prim., Vulg.), XI 5 τοῦ στόματος αὐτῶν, XI 8 τὸ πτώμα αὐτῶν, XIII 16 τῆς χειρὸς αὐτῶν and τὸ μέτωπον αὐτῶν. The corresponding plural is used with reference to the sum total of such things *e.g.* Apoc. XIV 1 τῶν μετώπων αὐτῶν, XVII 17 τὰς καρδίας αὐτῶν, XIX 18, 21 σάρκας βασιλέων (6 times), and perhaps XVIII 24 (X) αἶματα προφητῶν. We cannot discover in these singulars and plurals any essential difference with the values as set out in *par.* 6.2.1.1: the author uses the plural when stressing the plurality of the identical things possessed by a group, if he does not want to stress this plurality he uses the singular.

6.2.1.5. Although the *poetical plural* is alien to popular Koine-Greek we will discuss it here because of its probable occurrence in Apoc. XII 12 εὐφραίνεσθαι (*i.e.* -σθε) οἱ οὐ(ρα)νοί, while elsewhere in the book only the singular occurs (49 times). The supposed distinction between sg. "sky" and pl. "heaven" does not hold for the Apoc.:³ our only instance figures in a quotation from Isaiah XLIX 13 and has to be judged according to the use of language of the LXX, because there for the first time in Greek literature the plural οὐρανοί is frequently used: it hardly occurs in the classical authors.⁴ The fact that the Hebrew equivalent עֲמָרָם is a plurale tantum, probably did not influence the use of the plural in Greek (56 times),

¹ Schwyzer, *o.c.*, II, *p.* 43.

² Moulton-Howard, *A Grammar of New Testament Greek*, vol. III. Syntax by N. Turner, Edinburgh, 1963, *p.* 26.

³ Blass-Debrunner, *o.c.*, *par.* 141.1.

⁴ See G. Kittel, *Theologisches Wörterbuch zum Neuen Testament*, V, *p.* 497 *n.* 2, *s.v.* οὐρανός; F. Torm, *Der Pluralis οὐρανοί*, Z.N.W. 33, 1934, *pp.* 48-50.

the LXX having rendered רָם in the majority of cases (c. 370x) by the singular οὐρανός . The Greek plural appears to have been used mainly in those contexts that are translations of poetical or exalted portions, like songs, prayers, eulogies. As it is only for the Hellenistic period that we may reckon with the Jewish conception of a number of heavens, the rendering οὐρανοί in the older books like Isaiah has probably only the value of "lofty style". The quotation in the Apc. occurs likewise in a poetical part namely in a hymn, and therefore we think it likely that St. John had some knowledge of this stylistic value of οὐρανοί , which cannot have the value of an ordinary plural, the idea of many heavens being likewise alien to the Apc. As the Greek poetical plural was mainly found in tragedy it will not have influenced the LXX use of language. We shall have to look for an explanation in Hebrew which also possessed such a category. As the value of loftiness was absent from pluralia tantum like רָם , we believe that the Jewish translators carried over into its Greek equivalent the opposition known to them from other Hebrew word-pairs.¹

In all probability such lofty plurals were marked as opposed to the singular which could be used in lofty style or not, and which was itself not positively lofty or low e.g. Psalm CIII (CIV) 2 $\text{ἐκτείλων τὸν οὐρανὸν ὥσει δέσπον}$.

6.2.1.6. *Singularia Tantum and Pluralia Tantum*. Words which occur in the singular only or only in the plural cannot be said to take part in the category of number. Their meaning is therefore different from that of a word which does take part in the categories of number. It is only from the formal point of view that such word can be reckoned to belong to the singular or to the plural category. Examples of singularia tantum from the Apc. are ἥλιος (e.g. I 16), εἰρήνη (e.g. I 4), δικαιοσύνη (e.g. XIX 11); of pluralia tantum: δυσμαί "West" (XXI 13), κριθαί "barley" (e.g. VI 6). Sub 3 we have already discussed plurals like ὕδατα and αἵματα which have a wider semantic spectrum than the corresponding singulars. A further example of this kind in the Apc. is ἔθνη : a) "peoples" b) "peoples other than Israel, heathens" (XI 2); compare Hebrew גוֹיִם (Vulgate: *gentes*). Such words can be said to be singularia or pluralia tantum as far as only one of their aspects of meaning is concerned, but as there is no wide gap between this aspect of meaning and the rest of the word meaning,

¹ See Gesenius-Kautzsch, *Hebräische Grammatik*, Leipsic 1909, pp. 415-416.

we do not believe that there are two words ὕδωρ, or αἶμα, or ἔθνος. In spite of the fact that a plural ἥλιοι "sun beams", "sunny days" did exist we have mentioned ἥλιος as an example of a singulare tantum, because the plural was used only by the classical authors Thucydides and Theophrastus, and probably in imitation of these by the later poet Aelian.

A doubtful case is αἰῶνες which is frequently used in the LXX and N.T., but is hardly found in Classical authors.¹ In the Apc. it is used only in the stereotype εἰς (τοὺς) αἰῶνας (τῶν) αἰώνων (e.g. I 18) which may be a quotation from 4 Macc. XVIII 24. The frequency of the plural is due to the LXX rendering of the Hebrew עֲלָמִים and can therefore be considered as a Hebraism.

6.2.1.7. *Conclusions.* As the aspects discussed sub 2, 3 and 4 are in our opinion not different from the value as described sub 1, there is no reason for distinguishing special singulars and plurals like the "distributive singular" or the "collective plural", etc. The generic aspect is not correlated with any difference in form and can be concluded from the context only; moreover, it is found in both the categories of number. The only special distinction which remains is then the poetical plural by the side of the ordinary plural. The values of the number categories can now be set out as follows:

unmarked	marked
1) without specification as to number and: 2) without specification as to style	a) with specification as to number or: b) with specification as to style
Singular	Plural

6.2.2. *Values of Diminutives and Non-Diminutives.* Words belonging to the diminutive category can have three aspects of meaning as opposed to their non-diminutive counterparts:

- (1) "Diminutive" in the neutral sense: the speaker mentions a thing as little e.g. παιδίον "little boy", ἀρτίδιον "small loaf" or "piece of bread".
- (2) "Diminutive" in the pejorative sense: the speaker assumes something to be little in a denigrating way e.g. 2 Tim. III 6

¹ See G. Kittel, *Theologisches Wörterbuch zum Neuen Testament*, I, p. 200 n. 1, s.v. αἰών; cf. E. Norden, *Die Geburt des Kindes*, Darmstadt, 1958, 3rd ed., p. 32 n. 2.

αἰχμαλωτίζοντες γυναικάρια σεσωρευμένα ἁμαρτίαις and Xenophon *Mem.* II, 3, 16 τὰ μὲν γὰρ πονηρὰ ἀνθρώπια

- (3) "Diminutive" as an expression of endearment *e.g.* John XXI 5 παιδία, μή τι προσφάγιον ἔχετε;

As will appear from the form description the diminutive category has several form classes; the peculiar phenomenon occurs, however, that one and the same non-diminutive word can be opposed to more than one diminutive, *e.g.* κιβωτός to κιβώτιον, κιβωτίδιον, κιβωτάριον.¹ As opposed to one another these different diminutives cannot be shown to have been correlated with any difference in value, but this does not mean that such differences did not exist. It is in all probability due to the nature of our sources that such semantic differences escape our notice; modern parallels are there—*e.g.* the wealth of diminutives in Russian and Lithuanian—to show us that all kinds of more subtle differences in meaning can only be determined with the help of living informants. The above description of values is therefore probably lacunary.

As opposed to the non-diminutives the diminutives are probably the marked members of the opposition. The non-diminutive παῖς for instance, can according to context refer to a child, big or little, contempted or beloved, or without any reference to its size or to the feelings of the speaker. On the other hand παιδίον or παιδάριον must have one of the diminutive aspects, or a combination of aspect 1 and either 2 or 3.

6.2.3. *Values of Vocative, Nominative and Remaining Cases.* As opposed to one another the case categories differ in value by their specific references to the participants and non-participants of the speech act, namely the speaker, the person spoken to, and the person or non-person that is neither speaker nor addressee.

Vocative and Nominative. We shall first consider these cases in their independent uses, which means here: not used as a subject or predicate noun in combination with a finite verb, or as an apposition with another substantive.

When all this is not the case the *vocative* refers to a person or thing as the addressee *i.e.* the living being spoken to, or the thing conceived of as such *e.g.* Luke XXII 57 οὐκ οἶδα αὐτόν, γύναι, and 1 Cor. XV 55 ποῦ σου, θάνατε, τὸ κέντρον. The addressee may be

¹ L. R. Palmer, *A Grammar of the Post-Ptolemaic Papyri*, London, 1948, p. 90.

present with the speaker or not. In the latter case, and also with abstract nouns in general, the value of the vocative may be closer to a rhetorical address or exclamation, than to an actual address *e.g.* Rom. XI 33 ὁ βάθος πλούτου καὶ σοφίας καὶ γνώσεως θεοῦ.¹

The independent *nominative* refers:

a) to a non-participant, for instance, in nominal sentences like Hebr. III 4 ὁ δὲ πάντα κατασκευάσας θεός (Vulgate: *Qui autem omnia creavit Deus est*);

b) to the addressee, the singular being usually preceded by the definite article *e.g.* John XX 28 ἀπεκρίθη Θωμᾶς καὶ εἶπεν αὐτῷ· ὁ κύριός μου καὶ ὁ θεός μου (without the article *e.g.* Matt. IX 27 (B, G) but here combined with an imperative: ἐλέησον ἡμᾶς υἱὸς Δαυιδ (D, Θ: υἱε);

c) probably to the speaker in such formulas of greeting as P.S. I. 4, 394 Ἰάσων Ἀδμήτῳ χαίρειν. Ἐχω παρὰ σου *etc.*, *cf.* Gal. I 1-2 Παῦλος . . . καὶ οἱ σὺν ἐμοὶ πάντες ἀδελφοί, ταῖς ἐκκλησίαις τῆς Γαλατίας.²

When a vocative occurs together with a 2nd person verb in the same sentence, there are two explicit references to the addressee *e.g.* in Luke XIII 13 γύναι, ἀπολέλυσαι τῆς ἀσθενείας σου, and John XIV 9 οὐκ ἔγνωκας με, Φίλιππε; On the other hand, when a nominative is used together with a 2nd person verb, it is this verb only which explicitly refers to the addressee: the nominative is ambivalent and can also be used with a 3rd or 1st person verb *e.g.* Apoc. XVIII 7 κάθημαι βασιλίσσα. In all these combinations the nominative does not seem to refer to a specific person in the speech situation, it rather indicates a connection with the person or non-person implied by the verb *e.g.* ὁ ἀνὴρ λέγει and ὁ ἀνὴρ ἦν ἀγαθός. The nominative functions then as a syntagmatical indication. Although the combinations of nominatives with a 1st or 2nd person verb are much more seldom than those of the nominative with 3rd

¹ For pupils' difficulties with the vocative *cf.* Winston Churchill, *My early Life*, London, 1944, p. 25: (his teacher explaining the use of the vocative "o mensa") "You would use it in speaking to a table", (W.C.) "But I never do."

² The instances are personal names as substantives happen to be rare in such formulas, but in 3 John 1 a substantive is found. — In the Elamite language the substantive system contained a special category of first person substantives: *sunkik* "I the king" *vs.* *sunkir* "he the king" (*cf.* the word groups *sunkik sunkimek* "I the king of the kingdom" *vs.* *sunkir sunkimer* "he the king of the kingdom") (quoted from A. Meillet-M. Cohen, *Les langues du monde*, Paris, 1962, p. 197).

person verbs, the relation nominative-verb is in all these combinations identical, compare *e.g.* Apc. XVIII 7 κάθημαι βασίλισσα “a queen I sit (RSV)” with κάθεται βασίλισσα which is usually translated by “a queen sits”, but has properly speaking the meaning of “a queen *she* sits” or “as a queen *she* sits”, because κάθεται is itself equivalent to “he/she/it sits”.¹

It is, however, doubtful to what extent the relation between the vocative and a 2nd person verb can be compared with that of nominative and verb, because it is quite conceivable that the vocative was always accompanied by a special intonation and preceded and followed by a pause marking it off from the rest of the sentence, just as this was almost certainly the case in such sentences as Luke XXII 57 quoted above. The difference with nominative plus verb may have been that the latter could have two contents according to the intonation:

(1) γυνή, ᾄδεις “woman, you are singing”

(2) γυνή ᾄδεις “(as) a woman you are singing”;

the combination of vocative and 2nd person verb could probably have the first content only. Instances like Theocritus XVII 66 ὄλβιε κοῦρε γένοιο, in which the predicate noun is in the vocative, are very incidental; the usual construction was as in Apc. IV 11 (025) ἄξιός ἐστι, κύριε, ὁ θεὸς ἡμῶν, λαβεῖν *etc.* Different from this instance are cases like Callimachus *frag.* 213 ἐκλήθης Ἰμβρασε because they are the passive to ἐκάλεσάν σε Ἰμβρασε, *cf. e.g.* John XIII 13 φωνεῖτέ με ὁ διδάσκαλος καὶ ὁ κύριος: “you call me ‘Teacher’ and ‘Lord’ . . .”; the vocatives are in these sentences quotations from direct speech; *cf.* on the other hand Matt. I 25 ἐκάλεσεν τὸ ὄνομα αὐτοῦ Ἰησοῦν.²

What has been remarked on the combination of nominative and finite verb holds also for nominative appositions: they occur in combination with antecedents which themselves can refer to any participant or non-participant *e.g.* Apc. I 9 ἐγὼ Ἰωάννης (speaker); Luke XI 39 ὑμεῖς οἱ Φαρισαῖοι (addressees); Apc. I 4-5 χάρις ὑμῖν . . . ἀπὸ Ἰ(ησοῦ) Χ(ριστοῦ) ὁ μάρτυς, *etc.* (third person).³

¹ A more detailed discussion of these questions would also have to deal with the pendent nominative; as it belongs to syntax it is beyond our present scope.

² *Cf.* Schwyzler, *o.c.* II, p. 62, and Blass-Debrunner, *o.c.*, *par.* 143 and 147-3.

³ In the Apc. a nominative can be appositional not only to a vocative, or to another nominative, but also to oblique cases, see *par.* 6.2.4.2.1.

The vocative, however, can be appositional only to another vocative or to personal pronouns which refer to the addressee *e.g.* Phil. IV 3 ἐρωτῶ καὶ σέ, γνήσιε σύζυγε. According to Zerwick the vocative in the N.T. is not used as an apposition to another vocative, the nominative being used instead;¹ we found, however, some exceptions in the combinations of titles and proper names: Apc. XXII 20 Κ(ύρι)ε Ἰ(ησο)ῦ, Acts XXVI 2 βασιλεῦ Ἀγρίππα.

Oblique Cases. The genitive, dative and accusative cases as such are probably used to refer only to non-participants of the speech act. They can, however, be connected with words, such as the personal pronouns, which refer to a participant *e.g.* 2 Tim. I 8 ἐμέ τὸν δέσμιον and Rom. II 27 σὲ τὸν . . . παραβάτην, or with demonstrative pronouns which refer to the neighbourhood of the participants *e.g.* Aeschylus *Agam.* 1438 γυναικὸς τῆσδε (*i.e.* ἐμοῦ) and Sophocles *Oed. Tyr.* 534 τοῦδε ἀνδρὸς (*i.e.* ἐμοῦ).² This probably means that the oblique cases are unmarked as opposed to the vocative.

Conclusion. When the case categories are used in such a way that they do not depend on words which themselves refer to participants the voc. is correlated with a reference to the addressee, while the others refer to participants/non-participants according to context (nom., gen., dat., acc.). These references are absent or at least irrelevant, as soon as these cases are used as appositions, or when the nominative is used with a finite verb (as subject or as predicate noun). The case categories function then as syntagmatical indications only, indicating that the words in question are connected with another vocative, another nominative, *etc.*, or with the finite verb (with the vocative the latter is the case only in Theocr. XVII 66 ὀλβιε κοῦρε γένοιτο). The opposition between the vocative and the remaining cases can now be schematized as:

<i>marked</i>	<i>unmarked</i>
participant (addressee)	participant or non-participant
Vocative	Nominative, Genitive, Dative, Accusative.

¹ M. Zerwick, *Biblical Greek*, Rome 1963, p. 11.

² Of this latter usage we have instances from tragedy only.

6.2.4. *Syntactical Valence of the Case Categories.*

6.2.4.1. *General Remarks.* The further correlates of the case categories are probably for the greater part, but not exclusively, differences in syntactical valence or combinability.¹ The description of these differences in valence belongs to syntax, while the categorial values if any would have to be dealt with under morphology, but they can only be determined in the course of a thorough investigation of the rather extensive syntactical valences of the case system as a whole. Let us take the genitive for example. The range of its valence comprises different syntactical connections with: 1) substantives 2) adjectives 3) prepositions 4) interjections 5) verbs alone, or verbs plus adjuncts, such as an accusative and a dative. It is evident that some of these connections, especially those sub 3 and 5, form also part of the valence of other case categories. Two categories of case, therefore, have categorial *values* only in so far as they can be opposed to one another within the same type of *valence*, and belong to one and the same substantive paradigm.

For instance, there is an opposition of form and value between: a) the *genitive of time* and b) the *accusative of time*. Both can be used in sentences that are identical except for these two words, and both these words can belong to the same substantive paradigm, e.g.

a) ταύτης τῆς ἡμέρας ἔγραφον ἐπιστολὴν “on that day I was writing a letter”

b) ταύτην τὴν ἡμέραν ἔγραφον ἐπιστολὴν “that (whole) day I was etc.”

There is here a difference in value, which seems to run parallel to that between the so-called *partitive object* and the ordinary object, e.g.

a) Αpc. II 17 δώσω αὐτῷ τοῦ μάννα “I shall give him of the manna”

b) δώσω αὐτῷ τὸ μάννα “I shall give him the manna”.

¹ For literature on the description of case values we refer to the article by A. H. Kuipers, *The Circassian Nominal Paradigm. A Contribution to Case Theory*, *Lingua* XI 1962, p. 231 ss. The opening paragraphs contain a survey of the different views held on the matter a.o. by R. Jakobson, A. W. de Groot and J. Kurylowicz. Cf. also J. P. Louw, *Linguistic Theory and the Greek Case System*, *Acta Classica* IX, 1966, p. 73 ss. For separate case categories see: J. Gonda, *Defining the Nominative*, *Lingua* V, 1955-56, p. 288 ss.; A. W. de Groot, *Classification of the Uses of a Case illustrated on the Genitive in Latin*, *Lingua* VI 1957, p. 8 ss.; E. Benveniste, *Pour l'analyse des fonctions casuelles: le génitif latin*, *Lingua* XI 1962, p. 10 ss.

In both pairs a) implies a partition, whereas b) does not: "not the whole day, but during that day", "not all the manna, but some of it".

On the other hand we think it doubtful, whether there is within valence *nr.* 5 any opposition between the *genitive of price* and the *instrumental dative*, both of which allow of being connected with verb plus accusative plus dative, respectively with a verb that can be connected with an accusative and a dative, *e.g.*

- c) οἰκίαν ὠκοδόμησα αὐτῷ τριῶν ταλάντων "I built him a house at the price of three talents".
 d) οἰκίαν ὠκοδόμησα αὐτῷ ταῖς χερσίν "I built him a house with my hands".

When the word or word group to be added to verb plus accusative plus dative denotes a price (being either a substantive plus a numeral, or an adjective like πολλοῦ), the genitive is used, but when it denotes an instrument, the dative is used. However, when unusual things are paid instead of the normal currency the genitive of price is avoided: Apc. V 9 καὶ ἡγόρασας τῷ θ(ε)ῷ ἐν τῷ αἵματί σου. As the notions of price and of instrument are inherent in the meaning of the substantives or adjectives used, whatever the case category to which they belong, they do not form part of the categorial values of the genitive or dative category. Consequently the uses of these cases are here in complementary distribution: it is not allowed to indicate a price in this syntactical connection by a dative substantive, or an instrument by a genitive substantive.

Such categorial values as the partitive value of the genitive can be found only after the description of the different kinds of case valence has been completed. As we shall not treat of syntax in this study we must refrain from dealing with the values which the cases may have by the side of their syntactical valences. Nevertheless we shall sum up in the paragraphs dealing with the peculiarities of the substantive in the Apc. those syntactical anomalies that could be observed quite easily. The remarks to be made there will be partly additions to the survey of the use of cases found in Charles' commentary.¹ In doing so we shall make use of the traditional terminology.

6.2.4.2. Use of the Nominative in the Apocalypse.

6.2.4.2.1. *Appositional Use.* That a nominative substantive may serve in the Apc. as an apposition, not only to another, preceding,

¹ Charles, *o.c.*, I, p. CXXXVIII ss.

nominative, but to the oblique cases as well, is a phenomenon already observed by Bengel.¹ The instances are the following: I 5 ἀπὸ Ἰ(ησοῦ) X(ριστοῦ) ὁ μάρτυς ὁ πιστός and so in II 13 and XX 2. The use of the nominative preceded by ὡς in XVI 13 εἶδον . . . πνεύματα τρία ἀκάθαρτα[ρτα] ὡς βάρτραχοι may belong here too, unless ὡς βάρτραχοι is connected with ἀκάθαρτα only and might have been followed by a copula verb (cf. at XXI 11 ὁμοιος λίθω τιμιωτάτῳ ὡς λίθω ἰάσπιδι κρυσταλλίζοντι).

Most of the instances, however, are of participles, for instance in II 20 [τὴν γυναικὰ σου τὴν Ἰεζάβελ ἣ λέγο[υσαν], and so in III 12, (V 12?), (VII 9), VIII 9, IX 13, (XIV 7), XIV 12, (XIV 14), (XXI 12 bis). The bracketed passages lack the definite article and are perhaps not to be considered as appositions. The last mentioned instance may come under a different heading as it probably reflects the finite use of the Hebrew-Aramaic participle (see *par.* 12. 3. 2. 3).

We believe that the famous anomaly in I 4 ἀπὸ ὁ ὦν καὶ ὁ ἦν καὶ ὁ ἐρχόμενος is also a nominative apposition, and that this passage only seemingly contains the use of “ἀπὸ with the nominative”. The explanation of Charles and others is that St. John in deference to the Divine Name has shrunk back from submitting it to declension, that is from using it in an oblique case (πτῶσις, *casus*). It is of course true that the grammatical terms *declinatio* and πτῶσις imply the conception of the nominative being the proper form and the other cases some kind of deformations, but is it reasonable to suppose that an author, whose vernacular language did not contain any categories of case in the proper sense, was familiar with such a way of thinking? If we consider the words ὁ ὦν *etc.* as the well known nominative apposition, we have to point of course to an antecedent. The scribes of a number of manuscripts have assumed that a genitive has been omitted; accordingly some cursives have here τοῦ ο ὦν or κυρίου ο ὦν, and the uncial 046 and many cursives, too, have θεοῦ ο ὦν. These are evidently additions meant to solve the puzzle, but ἀπὸ ὁ ὦν must be original, as it is found in the older uncials A, C, 8.

It is known that Hebrew manuscripts in square script retain occasional instances of the name Jhwh in so-called Old Hebrew or Phenician letters.² Similarly the LXX-mss. retain sometimes יהוה

¹ J. A. Bengel, *Apparatus Criticus ad Novum Testamentum*, Tübingen 1763, p. 488.

² For instance in the Qumran Habbacuc-commentary and in the Hodayoth.

in square letters, which was misread by Greek scribes as IIIII or even as THΓH *i.e.* τῆ γῆ in Daniel IX 2 (LXX).¹ Our assumption is now that at Apc. I 4 there was originally an alphabetical antiquity of the same kind, to which ὁ ὦν *etc.* was the apposition. The closest parallel is furnished by the Qumran-scrolls. In 1 Q.S. VIII 14 we find instead of יהיה four dots by each other's side in a quotation from Isaiah XL 3, and we think it very probable that the Apc. autograph may have had at I 4 the same indication of the Divine Name, an indication which could most easily be effaced by thumbing or by decay of the scroll.² The result was then an open space and this seemed of course meaningless to subsequent copyists who did not retain it: ἀπὸ . . . ὁ ὦν became ἀπὸ ὁ ὦν, which was shortened to ἀπὸ ὁ ὦν.

6.2.4.2.2. *Anomalies.* Curious passages are I 6 and II 13. I 6 runs in A: ἐποίησεν ἡμῖν βασιλείαν ἱερεῖς (probably not an acc.) τῷ θ(ε)ῷ; B, 025, 046 have ἡμας, C has ἡμων. This line as Charles has pointed out,³ is a quotation from Symmachus' and Theodotion's rather literal versions of Exod. XIX 6 יְהוָה-יְהוָה אֱלֹהֵינוּ מְלָכָם "a kingdom of priests". The LXX-version has βασιλειον ἱεράτευμα (quoted in 1 Pet. II 9), and Aquila translated by βασιλεία ἱερέων. Editors should therefore not place a comma after βασιλείαν, as ἱερεῖς is not an apposition, but represents a more grammatical ἱερέων.

The anomaly of ἀντ(ε)ιπας in II 13 καὶ ἐν ταῖς ἡμέραις Ἀντειπᾶς has called for several emendations of the text. The most plausible explanation is however, that the text is not corrupt and that this name is used in the nominative as an indeclinable. Parallels are furnished by several Galilaean inscriptions in which the Grecized nominative forms of Semitic names are likewise used as indeclinables *e.g.* Παρηγόρης υἱὸς Ἀνανίας *i.e.* Ἀνανίου.⁴

6.2.4.3. *Use of the Oblique Cases in the Apc.* The most frequent uses are the following:

¹ See J. Fischer, *Das Alphabet der LXX-Vorlage im Pentateuch*, Munster, 1924, p. IX (*cf.* J. A. Montgomery, *A Survival of the Tetragrammaton in Daniel*, *Journal of Biblical Literature* 40, 1921, p. 86); M. Delcor, *Des diverses manières d'écrire le tétragramme sacré dans les anciens documents hébraïques*, *Rev. Hist. Rel.* 147, 1955, p. 145 ss., and from antiquity: Hieronymus, *Ep. ad Marcellum ch. XXV*.

² The four dots have undoubtedly arisen from four successive yods, a variant notation of the well known tetragrammaton, *cf.* B. D. Eerdmans, *The Name Jahu*, *Oudtestamentische Studien V* 1948, p. 8.

³ Charles, *o.c.*, I, p. 16.

⁴ G. Mussies, *Antipas*, *Novum Testamentum VII* 1964, p. 242 ss.

a) the adnominal genitive *i.e.* a genitive linked syntactically with a substantive or proper name: it comprises the traditional subjective, objective, possessive and partitive genitives and the genitive of quality; this usage occurs *c.* 720 times;

b) the dative indicating the indirect object: *c.* 135 times;

c) the accusative indicating the direct object: *c.* 650 times.
Less frequent uses are:

d) the non-adnominal genitives (of price and time, and those connected with specific verbs like ἀκούειν, γέμειν): 31 instances;

e) the instrumental and temporal datives and those connected with specific verbs or adjectives (αἰνεῖν, ἀκολουθεῖν, εὐχαριστεῖν, λατρεύειν, προσκυνεῖν, ὁμοιοσ): 51 instances (of which 21 instrumental)

f) accusatives of temporal extension and accusatives with infinitive (only in connection with δεῖ or λέγω): 24 instances.

The uses sub *a*, *b*, *c* correspond respectively with the Hebrew constructions of לְ plus substantive or of construct state plus substantive, with לְ plus substantive, and with תְּ plus substantive or with a substantive used alone. Of the less frequent *d*, *e*, *f* only προσκυνεῖν with dative and the accusative of temporal extension fit in with *b*) (לְהַשְׁתַּחֲוֹת) and *c*); the instrumental datives correspond with בְּ plus substantive, but here the Apc. has more often the literal ἐν plus dative (*c.* 35 times). Compare also the wavering use of cases with some of the verbs mentioned:

ad d) γέμειν with genitive: 6 times: with accusative: XVII 3
(*cf.* לֵאמֹר plus subst.).¹

ἀκούειν with genitive: 8 times (animate beings, except in V 13).

ἀκούειν with accusative: 12 times (inanimate things, except in III 20).²

ad e) προσκυνεῖν with dative: 11 times, with accusative: 9 times.³

6.2.4.4. Peculiarities of the Genitive in the Apc.

6.2.4.4.1. The *partitive genitive* occurs non-adnominally with the verb διδόναι:

¹ Perhaps also in XVII 4 unless τὰ ἀκάθαρα depends on ἔχουσα.

² III 20 τῆς φωνῆς μου, but a person's voice is sometimes considered as that person himself (*par.* 7.6.2.b).

³ For a survey of the use of cases and prepositional groups with the verb in the Apc. we refer to the commentaries by Charles, *pp.* CXXVII-CXXXIV, CXL-CXLI, and Allo, *pp.* CXL-CXLII.

II 17 δώσω αὐτῷ τοῦ μάνα τοῦ κεκρυμμένου

III 9 διδῶ . . . τῶν λεγόντων ἑαυτοὺς Ἰουδαίους εἶναι

In the second instance it is perhaps a kind of apposition to the group ἐκ τῆς συναγωγῆς τοῦ σατανᾶ, which is likewise partitive in meaning.¹ The temporal genitive is also a kind of partitive, for instance in contrast with the accusative of time which indicates the whole period. Unlike Charles we think that the group ἡμέρας καὶ νυκτός, which occurs five times, and ἡμέρας in XXI 25 are true temporal-partitive genitives and do not indicate a stretch of time *e.g.* IV 8 καὶ ἀνάπαισιν οὐκ ἔχουσιν ἡμέρας καὶ νυκτός λέγοντες: "nor by day nor by night", Vulgate: "*die ac nocte*".

6.2.4.4.2. *Genitive of the Definite Article plus Infinitive.* The only instance is XII 7 καὶ ἐγένετο πόλεμος ἐν τῷ οὐ(ρα)νῷ, ὃ τε Μιχαὴλ καὶ οἱ ἄγγελοι αὐτοῦ τοῦ πολεμῆσαι μετὰ τοῦ δράκοντος.

The usage of this construction in a nominal sentence as above is restricted to Greek which has been directly modelled on Hebrew. Instances are: Hosea IX 13 Ἐφραῖμ τοῦ ἐξαγαγεῖν and I Chr. IX 25, Ps. XXIV (XXV) 14, Eccl. III 15. In these passages it renders ל plus infinitive, a construction which has a jussive value. Hence Apc. XII 7 should be translated: "Michael and his angels had to war against . . .".

Elsewhere the construction has a final value, for instance in Thucydides and in the N.T.: *e.g.* Matt. XIII 3 ἐξῆλθεν ὁ σπείρων τοῦ σπείρειν.

6.2.4.4.3. Stylistically remarkable are the following "*Hebrew*" *genitives of quality* where Greek would use adjectives:

XIII 1 (XVII 3) ὀνόματα βλασφημίας (*i.e.* βλάσφημα)

XIII 3 ἡ πληγὴ τοῦ θανάτου αὐτοῦ (*i.e.* θανατήφορος)

XV 2 κιθάρας τοῦ θεοῦ probably θείας or μεγάλας (for this usage *cf.*

Ps. XXXV (M: XXXVI) 7 ὄρη θεοῦ and LXXIX (M: LXXX)

II τὰς κέδρους τοῦ θεοῦ.²

XVI 3 πᾶσα ψυχὴ ζῶης (*i.e.* ζῶσα).

A reflection of the Hebrew *superlative genitive* occurs seemingly in

¹ This partitive ἐκ plus genitive is found in the Apc. non-adnominally at II 7, 10, III 9, V 9, XI 9; after the numeral εἰς it is found: V 5, VI 1, 1, VII 13, IX 13, XIII 3, XV 7, XVII 1, XXI 9, while the genitive only follows on εἰς in IV 8 and XXI 21. *Cf.* E. Nachmanson, *Partitives Subjekt im Griechischen*, Göteborg. Högskolas Årsskrift XLVIII 2, 1942.

² *Cf.* D. Winton Thomas, *Unusual Ways of Expressing the Superlative*, *Vetus Test.* III 1953, p. 209 ss.

XVII 14 and XIX 16: κ(ύριος) κυρίων . . . καὶ βασιλεὺς βασιλέων, which is certainly a reminiscence of Deut. X 17 θεὸς τῶν θεῶν καὶ κύριος τῶν κυρίων, but we think it doubtful whether any superlative idea was attached to these instances, cf. Apc. I 5 ὁ ἄρχων τῶν βασιλέων τῆς γῆς and I Tim. VI 15 ὁ βασιλεὺς τῶν βασιλευόντων καὶ κύριος τῶν κυριευόντων. All these titles may be traced to Mesopotamia and adjacent regions, cf. the following epithets, of Ea: “*King of Gods*”, of Ashshur: “*Lord of all the Gods*”, and of Nebuchadnezzar, Darius I and the later Achaemenids and Arsacids: “*King of Kings*”, and this makes it unlikely that βασιλεὺς βασιλέων would be comparable to e.g. שִׁיר-שִׁירִים “the Song of Songs” i.e. ‘the Song’, and have then the meaning of “the King”. In the N.T. writings the construction is almost wholly restricted to words like βασιλεὺς, the only examples with a superlative meaning being: Luke I 50 (D, Θ) εἰς γενεὰς γενεῶν, Hebrews IX 3 “Ἀγία Ἀγίων, and Apc. I 18, etc. εἰς τοὺς αἰῶνας τῶν αἰώνων (together 14x, but A omits it at I 6 and V 14). In the LXX the latter is found only in 4 Macc. XVIII 24; in Daniel the comparable instances are εἰς τὸν αἰῶνα τῶν αἰώνων (III 90, VII 18) and εἰς τὸν αἰῶνα τοῦ αἰῶνος (XII 3), elsewhere in that book: εἰς τὸν αἰῶνα or εἰς τοὺς αἰῶνας, once εἰς πάντα τοὺς αἰῶνας (III 52).

Outside Biblical Greek we know of a single instance only which does not contain βασιλεὺς or a synonym: Palairot mentions γῆ γῶν as a legend of some Cretan coins¹ but we have not been able to detect such coins in S. Icard’s *Dictionary of Greek Coin Inscriptions*,² though ΓΗ and ΓΩΝ occur separately on reverse sides of coins, being continuations of resp. ΠΕΡ or ΤΡΑΘΗ on the obverses, the former on coins of Perge. Sophocles *Electra* 849 δειλαία δειλαίων κυρεῖς and Apuleius *Met.* XI 27 *dei deumque parentis*, which I found quoted as further instances, are wrong: the gen. pl. evidently depends on other words.

6.2.4.5.4. *Confusion with other Cases?* Instead of δούλου at I 1 ms. A reads ἐσήμενεν ἀπο[στ]είλας διὰ τοῦ ἀγγέλου αὐτοῦ τοῦ δούλου [αὐ]τοῦ Ἰωάννη, where all the other mss. have τῷ δούλῳ. The reading of A may be a mere error on the analogy of the preceding τοῦ ἀγγέλου, or an

¹ E. Palairot, *Observationes Philologico-criticae in Sacros Novi Foederis Libros*, 1752, p. 528, quoting Petr. Sequinus, *Select. Num. Lib.*, p. 114, i.e. P. Sequinus, *Selecta Numismata antiqua ex museo Petri Sequini* . . ., Paris 1665, which I could not consult.

² Chicago, 1968.

instance of the replacement of dative by genitive, which resulted eventually in the total disappearance of the former.¹ Compare from later times C.I.G. 9240 τῷ φιλοχρίστῳ Θεοδώρου (Cappadocia).

In I 10 καὶ ἤκουσα φωνὴν μεγάλην ὀπισθέν μου ὡς σάλπιγγος λεγούσης· ὁ βλέπεις *etc.* the genitive λεγούσης has been attracted to σάλπιγγος: properly it should be λέγουσαν (*cf.* IV 1). Similar cases are found in XVII 8 βλέποντων for -ντες, and XIX 1, 6 and XXI 9 (*cf.* the accusatives in X 8). In the enumeration of Babylon's trade products in XVIII 12-13 following on γόμον χρυσοῦ the substantives are either concordant with γόμον or with χρυσοῦ. Very curious is XIX 20 τὴν λίμνην τοῦ πυρὸς τῆς καιομένης, where the participle is in line with πυρὸς as to case, and with λίμνην as to gender (*cf.* XXI 8 τῇ λίμνῃ τῇ καιομένῃ). We think all these instances are proof of the author's uncertainty in using categories alien to his own language. Quite puzzling is I 15 καὶ οἱ πόδες αὐτοῦ ὅμοιοι χαλκολιβάνῳ ὡς ἐν καμίνῳ πεπυρωμένης (A, C, Primasius). There can be no doubt that the feminine participle is the original reading, which was improved in different ways by the other *mss.*: X πεπυρωμενω, 025, 046 πεπυρωμενοι *etc.* The word χαλκολιβάνῳ can be masculine or neuter, while καμίνῳ is feminine. It is therefore probable that the participle is to be connected with καμίνῳ; nevertheless it could also belong to χαλκολιβάνῳ just as μέγαν belongs to τὴν ληνόν in XIV 19 τὴν ληνόν τοῦ θυμοῦ τοῦ θ(εο)ῦ τὸν μέγα (*mss.* μέγαν), *cf.* XIX 20, XXI 9.²

The genitive in I 15 lacks, however, a preceding word to which it might have been attracted, but there is a solution if one proceeds from the Aramaic equivalent of πεπυρωμένη: ܡܦܝܪܝܢܐ, the feminine passive participle of ܦܝܪܐ. In Hebrew, however, this form can also be a substantive with the meaning of "smelting, purification", which could fit our context quite well: ὡς ἐν καμίνῳ πεπυρωμένης would be then: "as in a furnace of smelting" or "as in a smelting furnace".³ This implies that the Hebrew word was misunderstood

¹ J. Humbert, *La disparition du datif en grec (du Ier au Xe siècle)*, Paris, 1930.

² The curious turns in XIV 19 and XIX 20 have been ingeniously explained from the gender of the Hebrew equivalents of ληνός and πῦρ by G. J. Weyland, *Omwerkings- en Compilatie-Hypothesen toegepast op de Apokalypse van Johannes*, Groningen 1888, p. 137, but he seems to have overlooked the fact that the definite articles preceding these substantives are of the correct gender category.

³ The Hebrew substantive is spelled with final h (Jastrow, p. 1302b, Midr. Ps. 119, 81), but aleph and hē were often contaminated as *matres lectionis*.

or misread as an Aramaic participle, and was as such translated into Greek.¹

6.2.4.5. *Peculiarities of the Dative in the Apc.*

6.2.4.5.1. Instead of the expected pendent nominative, as in II 26, (*cf.* III 12), III 21, VI 8, we find a proleptic dative in I 5-6, II 7, 17, VI 4 (N*, C, 046), XXI 6(046), XXI 8, for instance II 7 τῷ νικοῦντι δώσω αὐτῷ φαγεῖν ἐκ τοῦ ξύλου τῆς ζωῆς.

6.2.4.5.2. Unclear is the use of the dative in XVIII 12 Α μαργαρίταις (N -των, C -τας), which is surrounded by genitives depending on the preceding γόμον. In VIII 3 καὶ ἐδόθη αὐτῷ θυμιάματα πολλά, ἵνα δώσει ταῖς προσευχαῖς τῶν ἁγίων and in v. 4 προσευχαῖς may seem strange, but the passage probably means "to offer it in behalf of the prayers".

The use of ὁμοίωμα with the dative in I 13 Α and IX 7 Α [ὁ]-μοίωμα υἱῷ ἄν(θρώπ)ου is comparable to the use of ὅμοιος with the dative; *cf.* also Ezek. I 26 ὁμοίωμα ὡς εἶδος ἀνθρώπου.²

6.2.4.6. *Peculiarities of the Accusative in the Apc.*

6.2.4.6.1. It is a well known characteristic of LXX-Greek that verbs are often accompanied by accusatives of content, instrumental datives or participles, which are of the same stem as those verbs, *e.g.* Isaiah VI 9 ἀκοῇ ἀκούσετε . . . βλέποντες βλέψετε. These constructions were the means to render the Hebrew combination of finite verb and absolute infinitive, which had the value of intensivity. In the Apc. there may be three instances of this:

XVI 9 ἐκαυματίσθησαν οἱ ἄν(θρώπ)οι καὶ ἡμέγα

XVII 6 ἐθαύμασα ἰδὼν αὐτὴν θαῦμα μέγα

XVIII 6 διπλώσατε διπλᾶ.

These passages are probably imitations of LXX-Greek or Masoretic Hebrew, because the absolute infinitive had disappeared from the Hebrew spoken or written in St. John's own days, and is likewise rare in the Aramaic of the Palestinian Talmud and Midrash.³

6.2.4.6.2. Blass-Debrunner mention III 3 οὐ μὴ γνῶς ποῦαν

¹ This is not unlikely: the Qumran scrolls show that Hebrew and Aramaic were used by each other's side in the first century A.D.

² In I 13 (N, 046) and XIV 14 (N, A, 046) ὅμοιον υἱὸν the case of the substantive has been attracted to that of ὅμοιον; the reverse has happened in IX 10 (A) ὁμοιοῖς σκορπίοις.

³ M. H. Segal, *A Grammar of Mishnaic Hebrew*, Oxford 1958, p. 165; W. B. Stevenson, *A Grammar of Palestinian Jewish Aramaic*, Oxford 1966, p. 53.

ώραν ἥξω ἐπὶ σέ as an instance of an *accusative indicating a point of time*, but it is of course possible that it still depends on the verb γνῶς. In XVIII 10 ὅτι μίαν ὥραν <ἤλθεν> ἡ κρίσις σου, and in vv. 17 and 19 *ms.* A only has accusatives, but these may quite understandably indicate a stretch of time: "within (exactly) the time of one hour the judgement on you has come *i.e.* has been fulfilled". On the other hand we find it difficult to interpret the datives found in the remaining *mss.*, as they can only indicate a *point* of time, which makes sense if μιᾷ is understood as πρώτῃ (*cf.* Apc. VI 1 and *par.* 10.4.2), but then it is a problem what might be here the meaning of πρώτῃ ὥρᾳ as such.

6.2.4.6.3. Among the *irregular accusatives* that turn up in the text there is one that might be explained as a too mechanical reflection of the Hebrew **-נכ**. In Biblical Hebrew there are some 15 passages where this prefix or preposition is not the well known nota accusativi but rather the indication of a certain emphasis,¹ and this value seems to be a lot more frequent in the later Mishnaic Hebrew. An emphatic or adversative value might quite well be present in XI 18 A καὶ δοῦναι τὸν μισθὸν τοῖς δούλοις σου τοῖς προφήταις καὶ τοῖς ἀ[γί]ους καὶ τοὺς φοβουμένους . . . τοὺς μικροὺς καὶ τοὺς μεγάλους "as well . . . as . . .", "both . . . and . . .". All other *mss.* have here τοῖς ἀγίοις καὶ τοῖς φοβουμένοις, but only *8c*, 025, 046, and 25 cursives have τοῖς μικροῖς καὶ τοῖς μεγάλους.

In a number of passages the accusative depends on a preceding εἶδον, although sometimes long sentences may come in between. The most curious instance is I 20 τὸ μυστήριον τῶν ἑπτὰ ἀστέρων οὗς εἶδες ἐπὶ τῆς δεξιᾶς μου καὶ τὰς ἑπτὰ λυχνίας τὰς χρυσᾶς (follows an explanatory copula-sentence). Furthermore: IV 4 θρόνους (ἶδον v. 1), VII 9 περιβεβλημένους, XIV 14 καθήμενον, XX 4 ψυχὰς.

In X 8 λέγουσαν has been attracted by λαλοῦσαν: the result is an anacolouthon. The accusative περιβεβλημένους in XI 3 προφητεύσουσιν . . . περιβεβλημένους σάκκους seems a mere error; only C and many cursives have περιβεβλημένοι.

6.2.4.7. Use of Cases with Prepositions in the Apc.

Ἀνά with nominative in XXI 21 (*mss.*) ἀνὰ εἰς ἕκαστος τῶν πυλῶνων ἦν, *etc.* (A: ινα).

Ἀπὸ with nominative: see above under nominative, *par.* 6.2.4.2.1.

Ἐπὶ with genitive, dative or accusative without difference as to

¹ W. Gesenius-E. Kautzsch, *Hebräische Grammatik*, Leipsic 1909, *par.* 117m; Segal, *o.c.*, p. 202.

being *in* a place or movement *to* a place: *cf.* XII 1 ἐπὶ τῆς [κε]φαλῆς αὐτῆς στέφανος (nominal sentence) with XII 3 ἔχων . . . ἐπὶ τὰς κεφαλὰς αὐτοῦ ἐπὶ τὰ διαδήματα. and X 2 ἔθηκεν . . . ἐπὶ τῆς θαλάσσης with XIV 16 ἔβαλεν . . . ἐπὶ τὴν γῆν.

There is, however, a tendency to use:

the genitive with καθημένου ἐπὶ: : IV 10, V 1, 7, VI 16, XVII 1, XIX 19, 21;

the dative with καθιμένῳ ἐπὶ : IV 9, V 13, VII 10, XIX 4;

the accusative with καθήμενος/-ν ἐπὶ: IV 2, 4, VI 2, 5, XI 16, XIV 14, XIX 11.

Exceptions are: VI 4, IX, 17, XIV, 16, XIX 18, XX 11 (but *κ* επανω αυτου), and XXI 5. The well known Hellenistic confusion of ἐν and εἰς is almost wholly absent in the Apc.: there is only one unambiguous instance, XI 11 πν(εῦμ)α [ζωῆς] . . . εἰσῆλθεν ἐν αὐτοῖς, which is the more remarkable as Ezek. XXXVII 10 from which it has been quoted, runs in the LXX: καὶ εἰσῆλθεν εἰς αὐτοὺς τὸ πνεῦμα καὶ ἔζησαν. The verbs in I 10 ἐγενόμην ἐν πν(εῦμα)τι, and in III 21 δώσω αὐτῷ καθεῖσαι . . . ἐν τῷ θρόνῳ need not be seen as expressing a movement towards something. With the perfective categories of the verb γράφειν the preposition ἐν is used *e.g.* I 3 τὰ ἐν αὐτῇ γεγραμμένα, with the other categories εἰς or ἐπὶ is found *e.g.* I 11 γράψον εἰς βιβλίον, III 12 γράψω ἐπ' αὐτόν.¹

The interjection οὐαὶ is used with the voc.-nom. in XVIII 10, 16, 19 (with a vocative in 3 Kings XIII 30 οὐαὶ ἀδελφε), with the dative in VIII 13 (A, 025) and XII 12 (046), (*cf.* outside Biblical Greek: Arrianus *Epict.* III 19, 1), and with the accusative in VIII 13 (*κ*, 046) and XII 12 (A, C; *κ* : ουαι εις). The Hebrew equivalent *וְהִנֵּה* may be followed by the substantive as such, or by the prepositions *לְ*, *בְ*, or *עַל* with a substantive.

6.3. Forms

6.3.1. *Forms of the Case-Number Categories.* The subdivisions which we shall carry through are:

¹ For the use of the verb in the Apc. with specific prepositions, a subject which lies outside our present scope, we refer to Bousset, *o.c.*, p. 165 ss.; Charles, *o.c.*, I p. CXXVII ss.; Allo, *o.c.*, pp. CXLI-II, and P. Regard, *Contribution à l'étude des prépositions dans la langue du Nouveau Testament*, Paris 1918, *a.o.* pp. 343, 350, 357. Out of the 54 grammatical Hebraisms listed by R. Helbing, *Die Kasussyntax der Verba bei den Septuaginta*, Göttingen 1928, p. 324, only *ἐμνύναι ἐν* occurs also in the Apc. (X 6), but see Charles, *o.c.*, I, pp. CXXIX (*sub* VI), CXXX (*sub* VIII), CXXXIII (*sub* XVI). See also *par.* 6.2.4.3.

a division into productive and unproductive categories: A and B;
 a division according to form classes, in which two groups can be distinguished: classes with a dative plural in *-οις/-αις* and those with a dative plural in *-σιν*: 1, 2, and 3.

A. Productive Case-Number Categories

6.3.1.1. Dative Plural in *-οις*

6.3.1.1.1. Different Nom. and Acc. Forms (Non-Neuters.)

voc.sg.	ἄγγελε [ángelɛ]	voc.pl.	} ἄγγελοι [ángeloj or -liü]
nom.sg.	ἄγγελος [ángelos]	nom.pl.	
gen.sg.	ἀγγέλου [angélu]	gen.pl.	ἀγγέλων [angélon]
dat.sg.	ἀγγέλῳ [angélo]	dat.pl.	ἀγγέλοις [angélojs or -lüs]
acc.sg.	ἄγγελον [ángelon]	acc.pl.	ἀγγέλους [angélaus]

bases: I ἄγγελο [ángelo] II. ἀγγελ-[ángel-)			
voc.sg.	II -ε	voc.pl.	} I -j or I -ü
nom.sg.	I -s	nom.pl.	
gen.sg.	II -u, penult accent	gen.pl.	I -n, penult accent
dat.sg.	I penult accent	dat.pl.	I -js or II -üs, penult accent
acc.sg.	I -n	acc.pl.	II -us, penult accent.

Remarks: The shifts of accent do not occur in the declension of nouns whose nom. sg. has penult or final accent like λιθοκόπος, δοῦλος, στρατηγός. Peculiarity: nom. sg. ἀδελφός, but voc. sg. ἄδελφε.

6.3.1.1.2. Identical Nom. and Acc. Forms (Neuters.)

voc.nom./acc.sg.	δρέπανον [drépanon]	voc.nom./acc.pl.	δρέπανα [drépana]
gen.sg.	δρεπάνου [drepanu]	gen.pl.	δρεπάνων [drepanón]
dat.sg.	δρεπάνῳ [drepanó]	dat.pl.	δρεπάνοις [drepanójs]

	bases: I. δρεπανο [drepano] II. δρεπαν-[drepan-]	
voc.nom./acc.sg. I -n		voc.-nom./acc.pl. II -a

The remaining forms of the paradigm are identical to those of 1.1. The shifts of accent occur only in the declension of nouns whose nom. sg. has antepenult accent, therefore not in the declension of *e.g.* βιβλίον, δῶρον, ξυρόν.

6.3.1.2. Dative Plural in *-αις*

6.3.1.2.1. Nom. Sg. in *-ς* (Masc.).

voc.sg.	πολίτα [políta]	voc.pl.	} πολῖται [políte]
nom.sg.	πολίτης [polítes]	nom.pl.	
gen.sg.	πολίτου [polítu]	gen.pl.	πολιτῶν [politón]
dat.sg.	πολίτῃ [políte]	dat.pl.	πολίταις [polítes]
acc.sg.	πολίτην [polítēn]	acc.pl.	πολίτας [polítas]

bases: I. πολίτη [políte], II. πολίτ- [polít-]	
voc.sg. II -a	voc.pl. } II -ε
nom.sg. I -s	nom.pl. }
gen.sg. II -u	gen.pl. II -on, final accent
dat.sg. I	dat.pl. II -es
acc.sg. I -n	acc.pl. II -as

Remark: The shift of accent in the gen. pl. occurs only in the declension of nouns which have no final accent; therefore not in the decl. of *σαλπιστής*. Basis I ends in *η* when the preceding phoneme is a consonant; it ends in *α* when the preceding phoneme is a vowel *e.g.* *νεανίας* (the acc. pl. is also *νεανίας*: I -s).

6.3.1.2.2. *Nom. Sg. in Vowel -α or -η (Fem.).*

voc.sg. {	ψάλτρια [psáltria]	voc.pl. {	ψάλτριάι [psáltrie]
nom.sg. }		nom.pl. }	
gen.sg. ψάλτριάς [psaltrías]		gen.pl. ψάλτριων [psaltrión]	
dat.sg. ψάλτριάι [psaltría]		dat.pl. ψάλτριάις [psaltríes]	
acc.sg. ψάλτρίαν [psáltrian]		acc.pl. ψάλτριάς [psaltrías]	

bases: I ψάλτρια [psaltria], II. ψάλτρι- [psaltri-]

voc.-nom.sg. I	voc.-nom.pl. II -ε
gen.sg. I -s, penult accent	gen.pl. II -on, final accent
dat.sg. I penult accent	dat.pl. II -es, penult accent
acc.sg. I -n	acc.pl. II -s, penult accent

Remarks: The shifts of accent occur only in the declension of nouns whose nom. sg. has antepenult accent, not in the decl. of *e.g.* *καταλαλιά*; the accent shift in the gen. pl. occurs if the nom. sg. has antepenult or penult accent: *ψάλτρια-ψάλτριων* and *ἁμαρτία-ἁμαρτιῶν*.¹

If the final vowel of basis I is *α* and if this *α* is preceded by another vowel or [r] the declension is as demonstrated; if it is preceded by [s] or [z], there is a 3rd basis III in -*η* [e] in the gen. sg. and dat. sg.: *χάλαζα-χάλαζης-χάλαζῃ*. If the final vowel of basis I is *η* it is preceded by a consonant with the exception of [r], [s] and [z]; the accentuation is either penult (shift of accent only in gen. pl.: *νίκη-νικῶν*) or final: *τιμή* (no shifts of accent). Exceptions: *ἄση* and *ῥῆ* have basis I in -*η* in spite of -σ-, -ζ-. A number of words are declined like *χάλαζα*: *c.* 265 with nom. sg. in -ρα (in Classical Attic they were declined like *ψάλτρια*), 180 in -να, 39 in -λα, and the word *ἔκλανθα* (these figures pertain to Classical and Koine-Greek together: for Koine-Greek they must be much lower as many words had become obsolete).

¹ According to Schwyzler, *o.c.* I, *p.* 383 there were, however, some analogical changes such as *αἵται*, *ἡμεραι*, *τραγώιδιαι*, *τιμώριαι*.

6.3.1.3. *Dative Plural in -σιν.*6.3.1.3.1. *Basis ending in Consonant.*6.3.1.3.1.1. *Nom. Sg. in -s (Non-Neuters).*

voc.-nom.sg.	φύλαξ	[phûlaks]	voc.-nom.pl.	φύλακες	[phulakes]
gen.sg.	φύλακος	[phûlakos]	gen.pl.	φυλάκων	[phulákon]
dat.sg.	φύλακι	[phûlaki]	dat.pl.	φύλαξιν	[phulaksin]
acc.sg.	φύλακα(ν)	[phûlaka(n)]	acc.pl.	φύλακας	[phûlakas]

basis: B φύλακ- [phûlak]

voc.-nom.sg.	B -s	voc.-nom.pl.	B -ες
gen.sg.	B -ος	gen.pl.	B -ον, penult accent
dat.sg.	B -ι	dat.pl.	B -σιν
acc.sg.	B -α	acc.pl.	B -ας

Remarks: The acc. sg. in -α was gradually replaced by -αν in the Imperial period, in the Apc.-A in XIII 14 εἰκόναν (but XIII 15 εἰκόνα), and XXII 2 μῆναν (*cf.* the adjective ἄρσεναν in XII 13).

The shifts of accent in the gen. pl. cannot occur in the declension of nouns whose nom. sg. has a final accent, like σφραγίς, gen. sg. σφραγίδος. If the nom. sg. is monosyllabic the genitives and datives have a final accent, *e.g.* γύψ, γυπός, γυπί, γῦπα(ν), γῦπες, γυπῶν, γυψίν, γῦπας. Exceptions are the genitives pl. of παῖς and θῶς: παίδων, θῶων.

According to the rules of phoneme distribution (*par.* 4.1.8.3.) /d/, /t/ and /th/ are dropped before /s/, whereas /g/ and /kh/ are replaced before /s/ by /k/, that is in the nom. sg. in -ξ and the dat. pl. in -ξιν. A peculiarity is that τριχ- before -ς and -σιν alters its initial phoneme to /th/: θρίξ.

Of paradigms with bases ending in /r/, /n/, /nt/ the nom. sg. ends resp. in /r/ or /n/ and lacks the familiar final /s/ *e.g.* ῥήτωρ, gen. sg. ῥήτορος, ἡγεμών, gen. sg. ἡγεμόνος, δράκων, gen. sg. δράκοντος; exceptions are: μάρτυς, gen. sg. μάρτυρος, ὀδούς, gen. sg. ὀδόντος, κτεῖς, gen. sg. κτενός, μείς, gen. sg. μηνός, ῥίς, gen. sg. ῥινός. The latter three, however, had or got asigmatic nominatives as competitors: κτήν, μῆν, ῥίν.

6.3.1.3.1.2. *Identical Nominatives and Accusatives (Neuters).*

voc.-nom./acc.sg.	δόμα	[dóma]	voc.-nom./acc.pl.	δόματα	[dómata]
gen.sg.	δόματος	[dómatos]	gen.pl.	δομάτων	[domáton]
dat.sg.	δόματι	[dómati]	dat.pl.	δόμασιν	[dómasin]

basis: B δοματ-[domat-]

voc.-nom./acc.sg.	B	voc.-nom./acc.pl.	B -α
gen.sg.	B -ος	gen.pl.	B -ον, penult acc.
dat.sg.	B -ι	dat.pl.	B -σιν

Remarks: According to the rules of phoneme distribution final /t/ of the basis is dropped in the nom. sg. and in the dat. pl. (*par.* 4.1.6). If the nom. sg. is monosyllabic the genitives and datives have a final accent (*cf.* 6.3.1.3.1.1), for instance: πῦρ, πυρός, πυρί, no plural cases; exceptions are οὖς, gen. pl. ὠτων, φῶς, gen. pl. φώτων.

6.3.1.3.2. Basis ending in Vowel.

6.3.1.3.2.1. Final Vowel of Basis: ι/ε.

voc.sg.	γένεσι	[génesi]	voc.pl.	} γενέσεις	[genésis]
nom.sg.	γένεσις	[génesis]	nom.pl.		
gen.sg.	γενέσεως	[genéseos]	gen.pl.	γενέσεων	[genéseon]
dat.sg.	γενέσει	[genési]	dat.pl.	γενέσεσιν	[genésessin]
acc.sg.	γένεσιν	[génessin]	acc.pl.	γενέσεις	[genésis]

bases: I γενεσι [genesi] II γενεσε [genese]

voc.sg.	I	voc.pl.	} I -s, penult accent
nom.sg.	I -s	nom.pl.	
gen.sg.	II -os	gen.pl.	II -on
dat.sg.	I penult accent	dat.pl.	II -sin
acc.sg.	I -n	acc.pl.	I -s, penult accent

Remarks: Basis I is followed by non-syllabic suffixes, II by syllabic ones. The accent is antepenult except where otherwise indicated, but the shifts do not occur in the declensions of shorter words like πόλις, ὄφις, of which the disyllabic cases have penult accent, the trisyllabics antepenult.

B. Unproductive (all belonging to 6.3.1.3.)

6.3.1.3.3. Basis ending in Consonant.

6.3.1.3.3.1. Modification of Medial Vowels.

a) πατήρ, voc. sg. πάτερ, further declension: πατρός, πατρί, πατέρα, πατέρες, πατέρων, πατράσιν, πατέρας; likewise μήτηρ, voc. sg. μήτερ, gen. sg. μητρός, *etc.*, and θυγάτηρ, voc. sg. θύγατερ, gen. sg. θυγατρός, *etc.*

b) ἀνὴρ, voc. sg. ἄνερ, further declension: ἀνδρός, ἀνδρί, ἄνδρα, ἄνδρες, ἀνδρῶν, ἀνδράσιν, ἄνδρας; likewise γαστήρ, gen. sg. γαστρός, *etc.*, and ἄρνος (gen. sg.), *etc.*, of which the nom. sg. ἄρην is obsolete; partially: σωτήρ, gen. sg. σωτῆρος, *etc.*, but voc. sg. σῶτερ.

c) ἀστήρ, gen. sg. ἀστέρος, *etc.*; the dat. pl. ἀστράσιν is probably obsolete; likewise ποιμήν, λιμήν, αὐχὴν: gen. sg. ποιμένος, *etc.*, ἀήρ, gen. sg. ἀέρος *etc.*, αἰθήρ, gen. sg. αἰθέρος, *etc.*, φρήν, gen. sg. φρενός, *etc.*, dat. pl. φρεσίν, ἀλώπηξ, gen. sg. ἀλώπεκος.

d) χεῖρ, gen. sg. χειρός, *etc.*, dat. pl. χερσίν

βοῦς, gen. sg. βοός, *etc.*, acc. sg. βοῦν, dat. pl. βουσίν, and so
νοῦς, χοῦς

ὁδοῦς, gen. sg. ὁδόντος, *etc.*, dat. pl. ὁδοῦσιν

πούς, gen. sg. ποδός, *etc.*, dat. pl. ποσίν

γυνή, gen. sg. γυναικός, *etc.*, voc. sg. γύναι (accents as in γύψ)

κύων, gen. sg. κυνός, *etc.*, dat. pl. κυσίν (accents as in γύψ).

Remark: The vocatives mentioned tended to give way to the nominative used as a vocative *e.g.* πατήρ (John XVII 11: B, N) and θυγάτηρ (John XII 15: P 66, B, D).

6.3.1.3.3.2. *Mixed Declensions.*

a) Neuters: nom./acc. sg. ὕδωρ, ἥπαρ, gen. sg. ὕδατος, ἥπατος.

b) Neuters: nom./acc. sg. τέρας, πέρας, κέρας, ἄλας, χρῶς, φῶς, οἶς, gen. sg. τέρατος, πέρατος, κέρατος, ἄλατος, χρωτός, φωτός, ὠτός, dat. pl. τέρασιν, *etc.*

The nom. sg. τέρας, *etc.* may be seen either as a separate basis by the side of τερατ-, or as the same basis τερατ- which has lost its final /t/ before /s/. For final /s/ in neuters *cf. par.* 6.3.1.3.4.3.

6.3.1.3.4. *Basis ending in Vowel.*

6.3.1.3.4.1. *Final vowel of basis: υ*

voc.sg.	πίτυ	[pítü]	voc.pl.	} πίτυες	[pítües]
nom.sg.	πίτυς	[pítüis]	nom.pl.		
gen.sg.	πίτυος	[pítüios]	gen.pl.	πίτύων	[pitüon]
dat.sg.	πίτυι	[pítüi]	dat.pl.	πίτυσιν	[pítüsin]
acc.sg.	πίτυν	[pítün]	acc.pl.	πίτυας	[pítüias]

basis: B πίτυ [pitü]

voc.sg.	B	voc.pl.	} B -es
nom.sg.	B -s	nom.pl.	
gen.sg.	B -os	gen.pl.	B -on, penult accent.
dat.sg.	B -i	dat.pl.	B -sin,
acc.sg.	B -n	acc.pl.	B -as

Remark: The shift of accent in the gen. pl. does not occur in the decl. of nouns whose nom. sg. has final accent like ἰχθύς. Of the monosyllabic noun μῦς the gen. and dat. have final accent: μυός, μυσίν. Neuter counterparts of this declension are rare: μέθυ, κόνδυ.

6.3.1.3.4.2. *Final Vowel of Non-Apocopate Basis: υ/ε*

voc.sg.	?		voc.pl.	{	πήχεις	[pékhis]
nom.sg.	πῆχυς	[pékhiis]	nom.pl.			
gen.sg.	{	πήχεως or πήχως	{	πήχεων or πήχων	[pékheon] or [pékhón]	
dat.sg.						πήχει	[pékhi]	dat.pl.	πήχεσιν	[pékhesin]
acc.sg.	πήχυν	[pékhiin]	acc.pl.	πήχεις	[pékhis]	

bases: I $\pi\eta\chi\upsilon$ [pekhu] II. $\pi\eta\chi\epsilon$ - [pekhe-] III. $\pi\eta\chi$ - [pekh-]			
voc.sg.	?	voc.pl.	} III -is
nom.sg.	I -s	nom.pl.	
gen.sg.	II -os or III -s	gen.pl.	II -on or III -on, final accent
dat.sg.	III -i	dat.pl.	II -sin
acc.sg.	I -n	acc.pl.	III -is

Remarks: Neuter counterparts of this declension are rare: $\pi\omega\upsilon$ (epic), $\acute{\alpha}\sigma\tau\upsilon$ (obsolete). The genitives $\pi\acute{\eta}\chi\epsilon\omega\varsigma$, $\pi\acute{\eta}\chi\epsilon\omega\upsilon$ were Atticistic: Moeris (*p.* 208 Bekker) $\pi\acute{\eta}\chi\epsilon\omega\upsilon$ Ἀττικοί· $\pi\eta\chi\omega\upsilon$ Ἑλληνες. (*cf.* *Apc.* XXI 17 A : $\pi\eta\chi\omega\upsilon$, $\aleph$: $\pi\eta\chi\epsilon\omega\upsilon$).

6.3.1.3.4.3. *Final Vowel of Non-Apocopate Basis: o/ε.*
identical nominative and accusative (neuters)

voc.-nom./acc.sg.	$\tau\epsilon\acute{\iota}\chi\omicron\varsigma$ [tíkhos]	voc.-nom./acc.pl.	$\tau\epsilon\acute{\iota}\chi\eta$ [tíkhe]
gen.sg.	$\tau\epsilon\acute{\iota}\chi\omicron\upsilon\varsigma$ [tíkhus]	gen.pl.	$\tau\epsilon\acute{\iota}\chi\omega\upsilon$, $\tau\epsilon\acute{\iota}\chi\epsilon\omega\upsilon$ [tíkhón] or [tíkhéon]
dat.sg.	$\tau\epsilon\acute{\iota}\chi\epsilon\iota$ [tíkhi]	dat.pl.	$\tau\epsilon\acute{\iota}\chi\epsilon\sigma\iota\upsilon$ [tíkhesin]

bases: I. $\tau\epsilon\acute{\iota}\chi\omicron$ - [tíkho-], II. $\tau\epsilon\acute{\iota}\chi\epsilon$ - [tíkhe-], III. $\tau\epsilon\acute{\iota}\chi$ - [tíkh-]			
voc.-nom./acc.sg.	I -s	voc.-nom./acc.pl.	III -e
gen.sg.	III -us	gen.pl.	I -n, final accent or II -on, penult accent
dat.sg.	III -i	dat.pl.	II -sin.

Remarks: For Homeric Greek the description of this declension would be quite different: the four bases to be assumed there are: $\tau\epsilon\acute{\iota}\chi\omicron$ -, $\tau\epsilon\acute{\iota}\chi\omicron\varsigma$, $\tau\epsilon\acute{\iota}\chi\epsilon$ -, $\tau\epsilon\acute{\iota}\chi\epsilon\sigma$ -. The last of these is still found in Koine-Greek in compounds *e.g.* $\tau\epsilon\lambda\epsilon\sigma\phi\omicron\rho\delta\upsilon\sigma\iota\upsilon$ (Luke VIII 14).

Plural genitives like $\tau\epsilon\acute{\iota}\chi\epsilon\omega\upsilon$ occurred in Koine-Greek especially when the phoneme preceding the ϵ was /r/ or /l/: $\delta\omicron\rho\acute{\epsilon}\omega\upsilon$ (*Apc.* VI 15), $\chi\epsilon\iota\lambda\acute{\epsilon}\omega\upsilon$ (Hebr. XIII 15, quoted from Hosea XIV 3) (*cf. par.* 3.2.2.4).

6.3.1.3.5. *Mixed Declension: Basis ends in Consonant or Vowel.*

6.3.1.3.5.1. *Basis ending in εw/ε.*

voc.sg.	$\beta\alpha\sigma\iota\lambda\epsilon\upsilon$ [basiléw]	voc.pl.	} $\beta\alpha\sigma\iota\lambda\epsilon\acute{\iota}\varsigma$ [basilís]
nom.sg.	$\beta\alpha\sigma\iota\lambda\epsilon\acute{\upsilon}\varsigma$ [basiléws]	nom.pl.	
gen.sg.	$\beta\alpha\sigma\iota\lambda\acute{\epsilon}\omega\varsigma$ [basiléos]	gen.pl.	$\beta\alpha\sigma\iota\lambda\acute{\epsilon}\omega\upsilon$ [basiléon]
dat.sg.	$\beta\alpha\sigma\iota\lambda\epsilon\acute{\iota}$ [basilí]	dat.pl.	$\beta\alpha\sigma\iota\lambda\epsilon\acute{\upsilon}\sigma\iota\upsilon$ [basiléwsin]
acc.sg.	$\beta\alpha\sigma\iota\lambda\acute{\epsilon}\alpha$ [basiléa]	acc.pl.	$\beta\alpha\sigma\iota\lambda\epsilon\acute{\iota}\varsigma$ [basilís]

bases: I. $\beta\alpha\sigma\iota\lambda\epsilon\upsilon$ [basiléw] II. $\beta\alpha\sigma\iota\lambda\acute{\epsilon}$ - [basilé-], III $\beta\alpha\sigma\iota\lambda\epsilon$ - [basilε-]			
voc.sg.	I	voc.pl.	} III -is
nom.sg.	I -s	nom.pl.	
gen.sg.	II -os	gen.pl.	II -on
dat.sg.	III -i	dat.pl.	I -sin
acc.sg.	II -a	acc.pl.	III -is

6.3.1.3.5.2. *Basis ending in ι/ιδ.*

ἔρις, gen. sg. ἔριδος, acc. sg. ἔριν (Tit. III 9), nom. pl. ἔρεις (1 Clem. XXXV 5) and ἔριδες (1 Cor. I 11); κλείς, gen. sg. κλειδός, acc. sg. κλ(ε)ῖν (Apc. III 7 : A, C, **ⲥ**) and κλεῖδα (Luke XI 52), acc. pl. κλ(ε)ῖς (Apc. I 18 : A, C, **ⲥ**) and κλεῖδας (Apc. I 18 : 046) Cf. Moeris (p. 201 Bekker) κλεῖν Ἀττικοί, κλεῖδα Ἑλληνες.

6.3.2. *Forms of the Diminutive Categories.*

6.3.2.1. *Introduction.* In the Hellenistic period there were two productive diminutive categories, namely those in -τον/-ιδιον and those ending in -άριον. They should be sharply distinguished from the categories that are likewise characterized by -τον/-ιδιον and -άριον, but which have no diminutive value. The former are supposed to have arisen historically spoken, from a non-diminutive category which would have had the value of "something like...", "a kind of..." Schwyzer, therefore, discusses both together in such a way that it is insufficiently clear that one has to do here with different categories; compare the non-diminutives δαιμόνιον (δαίμων) "demon-like being", τελώνιον (τελώνης) "office of a tax collector", the compositional ὑποπόδιον (ὑπό, πούς) "foot stool", with νησιόν "eyot" by the side of νῆσος "island", etc.

Moreover, it will appear upon closer investigation that the formal identity of the two groups of categories is not as complete as it is alleged: there are some differences in distribution as we shall see below.¹ In the Apc. the following words occur in -ιον/-ιον that do not belong to the diminutives: βιβλίον (I 11, etc.), δαιμόνιον (IX 20, etc.), εὐαγγέλιον (XIV 6), μαρτύριον (XV 5), χρυσίον (III 18); of ἱμάτιον (III 4) and θηρίον (VI 8) the original counterparts εἶμα and θήρ are obsolete in Koine-Greek.²

Although the distinction between these categories is carried through by several grammars such as those of Moulton-Howard, Mayser, Palmer, there is occasionally some inconsistency in the instances adduced, because *original* diminutives like ἀρνίον (by the side of ἀρήν, ἀρνός) which have now lost their diminutive values are still listed. Whenever such words have completely superseded the older non-diminutives, they should not be mentioned at all, since the former proportionality of νῆσος : νησιόν = ἀρήν : ἀρνίον does not hold any more, ἀρνίον having grown into a non-diminutive word

¹ See *parr.* 6.3.2.2.a, 6.3.2.4., 8.3.4.2.

² Such words tend, however, to remain being used in religious texts, titles, etc.: Πότνια Θηρῶν, not Θηρίων.

in its turn; it occurs 30 times in the N.T., of which 29 in the Apc., whereas ἀρήν is used only once, in Luke X 3, which is an adapted quotation from Isaiah LXV 25, that is from the older LXX-version; in the remaining N.T. writings only the word πρόβατον is found. Less pardonable is in our opinion that such grammars can mention instances like κουσούλιον 'cloak', by the side of which no partner without -ιον is even known to exist.

6.3.2.2. *Productive Types.*

-ιον: Preceded by *monosyllabic* bases (apocopated or not) ending in ζ [z], in a consonant preceded by η, ου, αυ, ευ [e, u, aw, ew], or in a consonant cluster *e.g.* ρίζιον (ρίζα), στρουθιον (στρουθός), ραβδιον (ράβδος). Exceptions: πόσιον, λίμνιον and 11 others. The grammars list many more, but these are only seeming exceptions: the words in question belong to the non-diminutive categories in -ιον *e.g.* ἱσθμιον, ὄρκιον. The remaining monosyllabic bases conform to no rule: they can belong either to type a) or to the following b). Before the Hellenistic levelling of the vowel quantities the distribution of -ιον *vs.* -ιον depended on the quantity of the preceding vowel *e.g.* κωπίον, παιδίον, but κτένιον, πόδιον.

b) -ιον: Preceded by *polysyllabic* bases (apocopated or not) ending in a *consonant* *e.g.* ἄβακιον (ἄβακος), τραπέζιον (τράπεζα). Exceptions are γυργαθιον, ῥιγοπυρετίον, χλωροστρουθιον; the last word can be accounted for as being a compound of χλωρο- and στρουθιον: *χλωρόστρουθος is not attested.

c) -ιδιον: Preceded by *polysyllabic* bases (apocopated or not) ending in a *vowel*. The non-apocopate bases end in ι (type γένεσις) or in υ (type πίτυς) *e.g.* πολίδιον (πόλις), πιτύδιον (πίτυς). The apocopate bases are usually taken from vowel-stems *e.g.* κωβίδιον (κώβιος), σηπίδιον (σηπία), ἐλάδιον (ἐλάα); only two have been taken from consonant-stems: κρεάδιον (κρέας, κρέατος), μνημάδιον (μνήμα, μνήματος). To this type belong seven *monosyllabic* bases (apocopated or not) ending in a vowel: βούδιον, μνούδιον, φλούδιον, ζώδιον, κώδιον, στώδιον, γράδιον.

6.3.2.3. -ίδιον: Preceded by bases (apocopated or not) ending in a consonant *e.g.* κλινίδιον (κλίνη), κιβωτίδιον (κιβωτός). There is only one restriction: -ίδιον cannot be preceded by a δ [d]; the diminutive to καρδιά is κάρδιον (see 6.3.2.2-a).

To this type belong 13 monosyllabic bases (apocopated or not) ending in a vowel: βοτῖδιον, νοτῖδιον, ῥοτῖδιον, -χοτῖδιον (in compounds), ξοτῖδιον, κοτῖδιον, ζωτῖδιον, νατῖδιον, μυτῖδιον, πτυτῖδιον, συτῖδιον, ὑτῖδιον. Except

when occurring in poetry some of these words cannot be distinguished with certainty from the vowel-bases mentioned *sub* 6.3.2.2-c, because ι in ζῳιδιον may be an unpronounced iota adscript.

6.3.2.4. -άριον: Preceded by bases (apocopated or not) ending in a consonant *e.g.* κυνάριον (κύων, κυνός), γυναικάριον (γυνή, γυναικός), or in a consonant-cluster *e.g.* δειπνάριον (δειπνον). Restriction: -άριον may not be preceded by a single ρ [r], but ρ-clusters are admitted: ἀνδράριον, μητράριον. Liddell-Scott mentions ἀμφοράριον, but this word appears in the source (P. Got. 17r, 17: VI/VII A.D.) as ἀμφολαριον with dissimilation of the former ρ. The *non*-diminutives in -αριον, however, may have a single ρ for instance in ὀπωράριον "*pomarium*" (to ὀπώρα "fruit").

To this type belong 5 monosyllabic bases (apocopated or not) ending in a vowel: ζῳάριον, ῳάριον, ποάριον, δρυάριον, πτυάριον. The word ῳάριον was perhaps used to avoid *ῳιδιον which may have been too similar to *ῳδῖον, a possible, but unattested diminutive to ῳδή "song": the diminutive to the latter was ῳδάριον.

Remarks: Type 6.3.2.2.-c may be seen as the complement either to type -ιον/ιον or to type -ιδιον which occurred by each other's side. Moreover, these two had a competitor in type -άριον, except of course for the restrictions mentioned. The three of them may be formed on the basis of the same non-diminutive *e.g.* κιβώτιον, κιβωτίδιον, κιβωτάριον by the side of κιβωτός.

6.3.2.5. *Probably Unproductive in the Hellenistic Period.*

a) -ίσκος, -ίσκη, -ίσκον: preceded by a consonant basis *e.g.* χιτωνίσκος-χιτών, or by an apocopate basis which ends in a consonant *e.g.* πυργίσκος-πύργος; five times preceded by an apocopate basis ending in a vowel *e.g.* ναῖσκος-ναός, once by a vowel basis: μυῖσκη-μῦς.

b) -σκος, -σκη, -σκον: 13 times preceded by basis in ι (apoc. or not) *e.g.* νεανίσκος-νεανίας, once by a basis in υ: μύσκος-μῦς. The c. 130 words in -ίσκος or -σκος are diminutives to masculine words, those in -ίσκη or -σκη (21) to feminine words, and those in -ίσκον or -σκον (5) to neuters. There are six exceptions to this rule but they may be due to the fact that the corresponding non-diminutives of the same gender are accidentally not attested in our sources.¹

¹ According to Palmer, *o.c.*, p. 91, the once productive category -ίσκος produced probably only three new words in the Post-Ptolemaic period in Egypt, while only 15 words of this kind were used at all. It may therefore be assumed that—at least in non-literary use—this category had become

6.3.2.6. *Unproductive.* The following list and the figures mentioned do not restrict themselves to Koine-Greek. The words cannot be shown to be in complementary distribution to a productive type of diminutives, but 16 of the 43 diminutives that contain the vowel *υ* are opposed to non-diminutives of the neuter type *τεῖχος* and with 12 of these no alternative diminutives are found *e.g.* to *κτῆνος* only *κτηνύδριον*, to *ἄνθος*, *εἶδος*, *ἔπος* only *ἀνθύλλιον*, *εἰδύλλιον*, *ἐπύλλιον* (but to *ξίφος*, *στῆθος*: *ξιφύδριον* and *ξιφίδιον*, *στηθύνιον* and *στηθίδιον*) Out of the total number of these unproductive formations 19 are the only diminutives opposed to the respective non-diminutives;

- a) -άκιον : κλισμάκιον — κλισμός (3)
- b) -άσιον : κοράσιον — κόρη (2)
- c) -άφιον : μυράφιον — μῦρον (7)
- d) -φιον : μνημάφιον — μνήμα (2)
- e) -ύδιον : βαρύδιον — βάρος (1)
- f) -ύδριον : λογύδριον — λόγος (24)
- g) -ύλλιον : ἀνθύλλιον — ἄνθος (11)
- h) -ύνιον : στηθύνιον — στήθος (1)
- i) -ύφιον : ὀρνύφιον — ὄρνις (6)

6.4. *Productivity*

6.4.1. *Productivity of the Different Form Classes of the Case-Number Categories.*

Productivity is a difficult matter to deal with, especially so when it can be studied only from the utterances of informants who are no longer alive, in other words when the language to be described is “dead”. It is only with the help of living informants that the linguist can answer the question: “Is it possible to form new words by means of this morphological procedure in an unrestricted and unpurposely way?” Since we cannot ask this question we must take refuge to counting the words of the different form classes, and hope to get some insight into their productivity in this way.

The conclusions that we reach by following this method are fairly certain if the members of a category amount to tens of thousands or to twenty five only: the former probably belonged to a productive category, the latter did not. Many categories, however, are borderline cases: when they amount to some hundreds of members a reliable verdict cannot be given.

unproductive. Of the remaining unproductive diminutives those in -άκιον became productive in Middle Greek (*cf.* Modern Greek: *παιδί-παιδάκι*).

It stands to reason that the vocabulary of the Apc. or even of the whole N.T. is too restricted for drawing any conclusions. For our purpose it would be necessary to count, say per fifty years or per century, how many words of each category are actually attested for that period. Such countings have not been made, but Buck and Petersen have gathered and counted all the substantives and adjectives used from Homer till Byzantine times as late as Tzetzes.¹ This work enables us to get at least an impression as far as substantives and adjectives are concerned. We could not find the figures for all our subdivisions, as the authors' division of classes is different from ours: substantives and adjectives are sometimes added together.

Survey. A. Productive Classes

1.1., 1.2. types ἄγγελος, δρέπανον (with adjectives δίκαιος, -ν)	54.300
2.1. types πολίτης (5900) and νεανίας (c. 400)	6.300
2.2. types ψάλτρια (8335), χάλαζα (c. 760), νίκη (2980)	12.075
3.1.1. types φύλαξ (c. 5600), γύψ (225), ῥήτωρ (c. 4200)	10.025
3.1.2. type δόμα	3.300
3.2.1. type γένεσις (5200), πόλις (425)	5.625

B. Unproductive and Probably Unproductive Classes

3.3.1. πατήρ etc.	23
3.3.2. ὕδωρ, τέρας etc.	25
3.4.1., 3.4.2. πίτυς, πῆχυς, with adjectives γλυκύς	515
3.4.3. τεῖχος	400
3.5.1. βασιλεύς	550
3.5.2. ἔρις etc.	?

These figures show beyond a doubt that types ἄγγελος and δρέπανον—even when we assign half of the figure to the type of adjectives mentioned—have been by far the most productive classes. It should be borne in mind that the productivity of a class may coincide with the productivity of a derivational or transpositional category. For instance, the productivity of type γένεσις is largely dependent on the productivity of the transpositional category in -σις: ἀκροῶμαι-ἀκρόασις, ὑφαίνω-ὑφανσις, etc. It stands to reason that it is difficult to draw conclusions as to

¹ Chicago, (1945), pp. XV-XVII.

such cases of coincident productivity from Buck-Petersen's figures: these authors have listed the words according to the final phonemes of the stems only: transpositions like ἀμαρτία (from ἀμαρτεῖν) appear therefore under the same heading as καρδία. We shall give here a list of the figures of those endings which we suspect to hide productive transpositional categories:

types ἄγγελος <i>etc.</i> (54.300)	: κος 7.200 (<i>cf.</i> adjectives in -κος)
	: μος 4.000 (<i>cf.</i> substantives in -μός)
	: νος 4.000 (<i>cf.</i> adjectives in -νός, -ινος)
	: ρος 5.000 (<i>cf.</i> adjectives in -ρός)
	: τος 9.700 (<i>cf.</i> adjectives in -τός)
subtype πολίτης (5.900)	: τής 4.400 (<i>cf.</i> substantives in -τής)
subtype ψάλτρια (8.335)	: ία 7.500 (<i>cf.</i> substantives in -ία)
subtype νίκη (2.980)	: νη 1.200 (<i>cf.</i> substantives in -σύνη)
subtype φύλαξ (5.600)	: ίς 2.400 (<i>cf.</i> substantives in -ίς, gen. -ίδος)
subtype ῥήτωρ (4.200)	: ων 1.600 (<i>cf.</i> substantives in -ών)
type γένεσις (5.625)	: σις 5.150 (<i>cf.</i> substantives in -σις).

Types δόμα and βασιλεύς are almost wholly made up of words that belong to the transpositional categories in -μα and -εύς, some of the rare exceptions being αἶμα, σῶμα, βασιλεύς itself, and βραβεύς.¹

We have the impression that the number of substantive neologisms that were not due to the productivity of a transpositional or compositional category was generally low. For instance in the New Testament there occur 320 words that are used here for the first time in Greek literature. If we assume all of these to be true neologisms, we see that only 31 of them are substantives that are non-compounds and non-transpositions. Eight are undeclined loans from Hebrew and Aramaic, 20 are loan words from Latin, Hebrew or Aramaic, that have been adapted to some type of Greek declension. Ultimately there remain therefore three substantives only that are purely Greek, namely: φάγος formed on the basis of the aor. II ἔφαγον; ἄψινθος which is either a back formation from ἀψίν-

¹ In contradistinction to the substantives in -εύς which we considered as an unproductive type, the personal names and ethnics in -εύς were almost certainly productive: together these latter amounted to c. 1400 names, *cf.* F. Dornseiff-B. Hansen, *Rückläufiges Wörterbuch der griechischen Eigenamen*, Berlin 1957.

θιον, or one of the well known "pre-Greek" words and in that case accidentally unmentioned in earlier literature; third κατήγωρ a back formation from the nom.sg. κατήγορος which was considered to be a gen.sg. of subtype ῥήτωρ cf. ἄρξ "bear" from ἄρκος, πῶλυψ from πῶλυπος (i.e. πολύπους), δίακων from διάκονος.¹ Coptic **ⲙⲓⲕⲟⲣⲓ** from **ⲛⲟⲕⲧⲓⲕⲟⲣⲁⲗⲁ**.²

6.4.2. *Productivity of the Diminutive Types.*

To our regret Buck-Petersen's list could not be used in making an estimate of the number of diminutive words, as these have been listed with the adjectives ending in -ιος. Palmer, however, has carefully distinguished between diminutives and those words which resemble them formally but have no diminutive value. He has divided each category discussed into four groups according to period, so that it can be seen which types of words were productive in Roman Egypt. The productive diminutives were there the categories -ιον/-ιον/-ιδιον, -ιδιον and -άριον.³

6.5 *Morphological Valence of the Substantive System*

6.5.1. *Gender.* A restricted group of substantives takes part in the categories of feminine and masculine gender. Semantically these words are indications of relatives, professions, titles, etc., and animals. In first century Koine-Greek the following categories existed:

Productive

a) Fem. -τρια, masc. -τής, both transpositional:

ψάλτρια — ψαλτής (ψάλλειν)

μαθήτρια — μαθητής (μαθεῖν)

ποιήτρια — ποιητής (ποιεῖν)⁴

Unproductive

b) Fem. -α (preceded by vowel or ρ) or -η (preceded by consonant except ρ):

θεά—θεός, ἐκυρά—ἐκυρός, γαμβρά—γαμβρός, πενθερά—πενθερός,

¹ Cf. L. Radermacher, *Koine*, Sitz. Ber. Akad. Wiss. Wien, Phil.-hist. Kl. 224B, 5. Abh. 1947, p. 41.

² J. Leipoldt, *Sinuthii Archimandritae Vita et Opera Omnia*, III, Paris, 1908, p. 51.

³ Palmer, *o.c.*, pp. 79-91.

⁴ From the historical point of view this category is, however, related to the agent nouns in -τήρ and -τωρ. See M. Lejeune, *Les noms d'agent féminins en grec*, *Revue de Philologie* XXIV 1950, p. 9 ss.

υίωνή—υίωνός, παιδίσκη—παιδίσκος, ὕιδῃ—ὕιδουῤ, ἀδελφιδῃ—ἀδελφιδουῤ, ἀνεψιαδῃ—ἀνεψιαδουῤ.

c) Fem. -ισσα:

μαγεύρισσα—μάγειρος, φυλάκισσα—φύλαξ, πατρώνισσα—πάτρων, ποιμένισσα—ποιμήν, βασίλισσα—βασιλεύς;

This category probably became productive in the Byzantine period;

d) Fem. -αινα:

θεράπαινα—θεράπων, δράκαινα—δράκων, λέαινα—λέων, λύκαινα—λύκος, σκυλάκαινα—σκύλαξ, γερδίαινα—γέρδιος.

Of these pairs the feminine gender was probably the marked category. Its value comprised both the fem. counterpart to the male profession and the wife of the male, hence μαγεύρισσα a) “butcheress” b) “butcher’s wife”. The marked status appears from the fact that the masculine category can indicate both male and female e.g. θεός “god” or “goddess”, but θεά only “goddess”. Furthermore the masc. plural can indicate according to context male and female together e.g. οἱ βασιλεῖς “the king and the queen”.¹

We have kept apart those pairs that have also a neuter counterpart and are incomplete transpositions to the adjective system; these are the well-known words:

ἀδελφός — ἀδελφή — (ἀδελφόν in K. Gk?)
 δοῦλος — δούλη — δούλον (comp. δουλότερος)
 χῆρος — χήρα — (χῆρον in K. Gk?)
 ἐταῖρος — ἐταίρα — ἐταῖρον.

The feminine words could take part in a diminutive category, but we have only three examples: λυκαίνιον, θεραπαινίδιον, αὐλητρίδιον.

6.5.2. Double Diminutives

With regard to the morphological valence of the diminutives the most striking point undoubtedly is the fact that a number of these words seems to take part in a second diminutive category at the same time. The occurring combinations are:

-δάριον : 8, e.g. βιβλιδάριον (-διον and -άριον)
 -αρίδιον : 11, e.g. παιδαρίδιον (-άριον and -διον)

¹ Cf. the article quoted in the preceding note, p. 10 note 1, and p. 14, notes 3, 4, 5.

- ίσκιον : 23, e.g. ναῖσκιον (-ίσκος and -ιον)
- ισκίδιον : 1, doubtful : χλανισκίδιον
- (ι)σκάριον : 9, e.g. ναῖσκάριον (-ίσκον and -άριον)
- αρίσκοις : 1, παιδαρίσκοις (-άριος and -σκοις)
- ασίδιον : 1, κορασίδιον (-άσιον and -διον).¹

From this list it appears that most of them contain the element -ισκ-, probably because the diminutives in -ίσκος *etc.* were no longer a productive category in Koine-Greek. Nevertheless there remain some words that are certainly to be seen as double formations such as the only diminutive found in the Apc., βιβλαρίδιον, because βιβλίδιον and βιβλάριον which it combines, are used in the contemporary language. The value may have been emphatically diminutive, "a very small book", in view of the fact that St. John is supposed to swallow it (X 9), but elsewhere such doublings may have had a comical force, for instance the personal name Ἀφροδιταρίδιον (Plato Comicus 3 D) "dear little darling". The textual tradition of this βιβλαρίδιον needs some discussion: it is found in κ^* , A, C**, whereas κ^c and C* have βιβλιδάριον. Swanson in his article on the N.T. diminutives has reached the conclusion that βιβλαρίδιον must here be the correct reading. The seven words known to end in -ιδάριον are all found in the plays of V-IVth century comedians, but the twelve ending in -αρίδιον date from Plato Comicus (c. 400 B.C.) till Byzantine times; our βιβλιδάριον therefore, was probably out of use in the 1st century A.D.² If this conclusion is right its occurrence in κ^c and C* must be considered as an Atticistic reading. Swanson's argument is, however, somewhat weakened by the fact that βιβλιδάριον was still used by Agatharchides (IInd cent. B.C.).

The relations between the different formations and diminutives which contain the basis βιβλ- may be arranged as follows:

- a) *non-dim.* βίβλος: 1. "papyrus" 2. "scroll of papyrus, book, *etc.*"
- b) *non-dim.* to a): βιβλίον "scroll of papyrus, book"; semantic aspect a-2) becomes obsolete and lofty: it is used especially to refer to sacred writings e.g. Matt I 1 βίβλος γενέσεως Ἰησοῦ Χριστοῦ

¹ Cf. Palmer, *o.c.*, p. 90.

² D. C. Swanson, *Diminutives in the Greek New Testament*, Journal of Biblical Literature 77, 1958, p. 134 ss.; βιβλαρίδιον is also found in Hermas, Vis. II 1, 3 and 4, 3.

(cf. Gen. V 1) and Apc. III 5 (from Ex. XXXII 32), XX 15 (from Ps. LXVIII 29) τῆς βίβλου τῆς ζωῆς “the Book of Life.”

c) *non-dim.* to a) (by -ιδ-): βιβλῖς (gen. sg. βιβλίδος) found only in the Etymologicum Magnum and synonymous with b), or meaning “cord of papyrus”.

d) *dim.* to a-2) (by -ιδιον) or to b) (by -διον): βιβλίδιον, since Antiphanes IV B.C.

e) *dim.* to a-2) (by -άριον) βιβλάριον, III B.C. and Lucilius I A.D.

f) *dim.* to b) (by -άριον): βιβλιάριον, Antisthenes (*ap.* Diog. Laert.) II A.D.

g) *dim.* to c) (by -άριον): βιβλιδάριον, Aristophanes V B.C., and Agatharchides II B.C.

h) *double dim.* to d) (by insertion of -αρ-) or to e) (by -διον): βιβλαρίδιον since the Apocalypse of St. John I A.D.

i) *double dim.* to f) (by -διον): βιβλιαρίδιον, Galen II A.D.

There are, however, instances of words which seem to take part in two productive diminutive categories but had probably no emphatic value. This may have been the case with:

ὄψον — ὀψάριον — ὀψαρίδιον

because ὀψάριον had probably lost its diminutive value as so many of these words did, compare for instance from Modern Greek the non-diminutive παιδί “child” and μάτι “eye” which have historically arisen from the diminutives παιδίον and ὀμμάτιον.

The further morphological valence of the diminutives was only slight, the following transpositions *etc.* being all the instances that we have been able to find:

by the side of παιδίον the transpositions παιδιόθεν “from childhood” (cf. ποῦ—πόθεν), παιδιότης “childhood”, παιδιώδης “childish”;

by the side of παιδάριον the compound παιδαριοτρόφος “keeper of young slaves”, and the transposition παιδαριώδης “childish”;

by the side of ψιχίον the transposition ψιχιώδης “minute”, litt. “crumb-like”.

6.5.3. Substantive Adverbs

The substantive system comprises also a number of—probably unproductive—*adverbial* categories. The traditional term *adverb* covers a group of categories and isolated words which have a syntactical valence in common (see *par.* 7.2.3), but which are part of different morphological systems:

- (1) substantive adverbs *e.g.* αὐτο-, χεῖρ—αὐτοχειρί
- (2) adjective adverbs *e.g.* δίκαιος—δικαίως
- (3) pronominal adverbs *e.g.* τίς—πῶς, ποῦ, πότε
- (4) numeral adverbs *e.g.* πέντε—πεντάκις
- (5) verbal adverbs *e.g.* κρύπτω—κρύβδην.
- (6) isolated adverbs *e.g.* πάλιν “again”, μόλις “scarcely”, λίαν “very”.

It belongs to the field of syntax to describe the common valence to which the adverb owes its name, and to investigate whether there are still some minor differences in valence between all these kinds. Morphology has to treat of the different *values* that may be correlated with them, *e.g.* with ποῦ *vs.* πόθεν *vs.* πότε, and with πεντάκις (see the chapters devoted to the separate systems). The different types of substantive adverbs are:

Type 1. αὐτοχειρί, πανοικί (Acts XVI 34), ἀμισθί, ἀσιτί (both in Job XXIV 6): basis ending in consonant (apocop. or non-ap.) followed by -ί or -εῖ both [i]; together *c.* 190 words, most of them compounds or words with prefixed ἀ-.

Type 2. ὁμοθυμαδόν (Acts I 14), ἐθνηδόν (4 Macc. II 19): consonant basis (apoc. or non-ap.) followed by -αδόν or -ηδόν (no rule can be found for this variation), or vowel basis plus -δόν; together 200 words, frequently used in Atticistic and Epic works (especially Oppian); ὁμοθυμαδόν occurs 12× in the N.T., 11× in the Book of Acts.

Type 3. καταλογάδην, παραβολάδην: consonant basis (apoc. or non-ap.) plus -άδην: 170 words mainly found in literary use of language.

Type 4. ξιφίνδα, βασιλίνδα, ταυρίνδα: consonant basis (apoc. or non-ap.) plus -ίνδα; 33 words especially used with the verb παίζειν (mainly in Pollux and Hesychius).

As far as we can see there are no differences in value between these four types, nor between these on the one hand and the adjectival adverbs in -ως on the other. In view of the fact that only the adjectival adverbs are certainly productive, the substantive (and verbal) adverbs may perhaps be considered as transpositions to that category.

6.6. *Further Peculiarities of the Substantive System in the Apc.*

The substantive system of Koine Greek differed not only by its cases from that of contemporary Hebrew or Aramaic.

Common Categories. The only categories which the three languages had in common were the categories of number: Like Koine Greek the different kinds of Aramaic had a singular and a plural category, but in Hebrew (Biblical and Mishnaic) there were three categories of number: singular, dual and plural, but in few paradigms only:

יָמִים — יְמִימִים — יוֹם

The presence of the dual category makes the values of the Hebrew singular and plural sometimes different from the singular and plural in Koine-Greek: the dual *vs.* sg. and pl. is marked ("two" or "both"), the plural *vs.* dual is unmarked ("two" or "more than two"), but marked *vs.* the singular, which is indifferent as to number.

Categories absent from K-Gk, present in Heb-Ar. These are the well-known categories of person (traditionally: "possessive categories"): *e.g.* in Hebrew:

sg. סוּסִי "my horse", סוּסְךָ "your(m.) h.", סוּסְךָ "your(f.) h." *etc.*
pl. סוּסַי "my horses", סוּסֵיךָ "your (m.) h.", סוּסֵיךָ "your (f.) h." *etc.*;

there were two categories without explicit reference to person, namely the *status absolutus* *e.g.* סוּסִים "horses" *vs.* *status constructus* *e.g.* סוּסַי "horses of . . ." (the singular סוּס is both st. absol. and st. cstr.). This opposition is correlated with a difference in syntactical valence, but it cannot be compared with the opposition between the Greek nominative and genitive.

Categories present in K-Gk, absent from Heb-Ar. Hebrew and Aramaic had hardly any diminutives: Gesenius-Kautzsch list only one instance from Biblical Hebrew, Segal some thirty from Mishnaic Hebrew, which belong to five different form categories, while Dalman mentions five examples from Palestinian Aramaic.¹ It is clear that these words did not belong to productive categories; moreover, their diminutive value is far from certain.

The above survey shows that the substantive systems of Koine-Greek and Hebrew-Aramaic had hardly any categories in common and therefore that their mutual comparability was very restricted. This fact has left some traces in the use of the Koine-Greek substantive in the Apc. of St. John.

¹ Gesenius-Kautzsch, *o.c.*, p. 250; M. H. Segal, *Mishnaic Hebrew and its Relation to Biblical Hebrew and Aramaic*, Oxford 1909, pp. 64-67 (*cf.* Segal, *Grammar of Mishnaic Hebrew*, p. 124); G. Dalman, *Grammatik des jüdisch-palästinischen Aramäisch*, Darmstadt, 1960, *photom. repr.*, p. 176.

First of all there is only one diminutive word in the Apc.: βιβλαρίδιον (in X 2, 9, 10). This relative poverty is remarkable in view of the fact that a high frequency is generally considered a characteristic of a more popular use of language and such a use might be present in the Apc. which contains so many solecisms. The almost total absence of diminutives can be explained from the inexistence of such a category in 1st century Hebrew or Aramaic.

Second we think that the fact that the form differences between the personal categories of Heb.-Ar. are located in the final syllables of the words: סוֹסֵי, סוֹסָה, etc. is reflected by the place of the genitives μου, σου etc. in the Koine-Greek translated from these languages. In LXX-Greek these pronouns are placed immediately after the substantives¹ and in the Apc. the same phenomenon can be observed: in *ms. A* these genitive pronouns immediately follow the substantive 321 times; in only 11 passages they precede the substantive and the article, seven of which occur in the Letters to the Seven Churches (*chrs. II-III*).²

¹ A. Wifstrand, *Die Stellung der enklitischen Personalpronomina bei den Septuaginta*, Bulletin Soc. Royale des Lettres de Lund, 1949-50, p. 44 ss.

² Cf. A. Wifstrand, *A Problem concerning the Word Order in the New Testament*, Studia Theologica III 1949, p. 182: postposition of the pronoun is likewise a characteristic of Hellenistic everyday usage, but in the Gospels there is still "a great surplus of immediate postposition".

CHAPTER SEVEN

THE ADJECTIVE SYSTEM

7.1. *Introduction and Survey of the System*

The adjective system in its most extensive form comprises nine sets of case-number categories, which are the adjectives in the current sense, and a category which is traditionally called the “adverb”, but to which we shall refer by the term “adjectival adverb” *e.g.* καλῶς, δικαίως, σωφρόνως. Because these adjectival adverbs have a syntactical combinability which is fundamentally different from that of the case-number categories they are often discussed in grammars together with words like πῶς, ποῦ, τότε *etc.* and isolated words like ἔτι, πάλιν, αἰεί, which are all supposed to have the same syntactical combinability. For this same reason we have maintained the traditional but useful term “(adjectival) adverb” but as καλῶς, δικαίως, σωφρόνως constitute one morphological system with καλός—καλή—καλόν, δίκαιος—δικαία—δίκαιον, σώφρων—σῶφρον, they must be treated together with these words. On the other hand, although πῶς, ποῦ, τότε are comparable to καλῶς *etc.* from the syntactical point of view, they belong to the morphological system of the pronouns and will be called “pronominal adverbs”. The isolated ἔτι, πάλιν, αἰεί do not belong to any morphological system, their only morphological role being that some of them may occur as compositional elements, πάλιν for instance in παλιγγενεσία.¹

The nine sets of case-number categories mentioned constitute as opposed to one another three categories of gender and three categories of comparison. The adjectival adverbs do not take part in the categories of gender and only incidentally in the categories of comparison. As these comparative and superlative adverbs are unproductive we have bracketed them in the scheme below; instead of these the neuter nom/acc.sg. of the comparative adjective and the neuter nom/acc.pl. of the superlative adjective were used. The adjective system can be schematized as follows:

¹ Such a non-morphological residue can be subdivided according to syntactical valence and positional use. For Classical Attic this residue has been discussed by F. W. Householder, in *Word Classes* (*i.e.* *Lingua* 17) 1966, p. 103 ss.

	<i>masc.</i>	<i>fem.</i>	<i>neut.</i>	<i>adv.</i>
positive	δίκαιος δικαίου etc.	δικαία δικαίας etc.	δίκαιον δικαίου etc.	δικαίως
comparative	δικαιότερος δικαιότερου etc.	δικαιοτέρα δικαιοτέρας etc.	δικαιότερον δικαιότερου etc.	(δικαιοτέρως)
superlative	δικαιότατος δικαιοτάτου etc.	δικαιοτάτη δικαιοτάτης etc.	δικαιότατον δικαιοτάτου etc.	(δικαιοτάτως)

We shall first discuss the different categorial values in the order: case-number, gender, adverb, comparative, and superlative. After that will follow in the same order an enumeration and analysis of the corresponding form categories.

7.2. *Categorial Values of the Adjective System*

7.2.1. *Values of the Case and Number Categories.* The values of these categories are identical to those of the corresponding substantive categories, but with an important restriction. They are fully relevant only when the adjective is used independently, "as a substantive", and not as one of the members of a substantive group. An instance of such independently used adjectives is Matt. V 45 τὸν ἥλιον αὐτοῦ ἀνατέλλει ἐπὶ πονηροὺς καὶ ἀγαθοὺς.

On the other hand, whenever an adjective is used as part of a substantive group like τὸν ἀγαθὸν ἄνδρα, the value of number and the case valence are also correlated with the corresponding categories of the substantive. Their repetition in the adjective has now rather the function of indicating that it is syntactically connected with the substantive *e.g.* Aristides, *Hymnus in Sarapidem* 362, 4 Ὡς τὴν καλλίστην ὦν ἐφορᾷ κατέχων πόλιν. In such groups as ἐν τῇ δεξιᾷ χειρὶ (Apc. I 16) this syntactical connection is also indicated by the position of article and adjective immediately before the substantive. Therefore, when adjectives are dependent we do not believe that their value of number and their case valence are fully relevant. These categories have now instead of the *value* of singular (or: plural) the *valence* that the adjective in question is to be connected with a singular (or: plural) substantive, and the case valence, for instance that of the accusative, is supplanted by another valence which implies that the adjective in question is connected with an ac-

cusative substantive.¹ It is the context which decides whether an adjective is actually dependent or independent when the substantive with which it may be connected has no article; a sentence like *παιδιά καλὰ ζητοῦσιν* may mean “they look for beautiful children” or “children look for beautiful (things)”.

7.2.2. *Values of Gender.* For the description of the values of these categories we must again distinguish between the independent and the dependent use of the adjectives. First we shall discuss the values of gender in independent adjectives, of which it must also be certain that they do not refer to a substantive present in the preceding context, a substantive which is not repeated for brevity's sake. In some of our instances the adjectives are substantivated, but that does not influence the values of gender.

7.2.2.1. *Independent Adjectives.* In independent adjectives the value of the feminine categories consists in the positive reference to a *female person* (we use the words feminine and masculine for the categories, the words female and male for the sexes) *e.g.* *Odyssey* ε, 212-213 ἐπεὶ οὐ πῶς οὐδὲ ἔοικε/θνητᾶς ἀθανάτησι δέμας καὶ εἶδος ἐρίζειν. From the New Testament we know only of instances that happen to contain participles or numerals: Matt. XXIV 41 δύο ἀλήθουςαι ἐν τῷ μύλῳ, μία παραλαμβάνεται, καὶ μία ἀφίεται, and Luke I 45 μακαρία ἡ πιστεύσασα (στεῖρα in Luke XXIII 29 μακάριαι αἱ στεῖραι is perhaps not an adjective).

The gender value of the masculine categories is the positive reference to a *person*, but this person may be male or female. Often the context gives a clue for us to decide whether woman (women) or man (men) is (are) spoken about, but not always so; in *e.g.* Apc. XXII 11 ὁ δίκαιος δικαιοσύνην ποιησάτω ἔτι καὶ ὁ ἅγιος ἁγιασθήτω ἔτι both sexes are meant indiscriminately. The masculine category is therefore unmarked as opposed to the feminine.

As opposed to the personal masculine and feminine categories the neuter is usually held to indicate inanimate things;² as there is in the grammars of Greek no special discussion of the gender values in independent adjectives it is probably assumed that these values are

¹ A recent survey of the syntactical functions of the case categories has been given by H. Schultink, *Opera virorum omnium bonorum veterum*, Lingua 21, 1968, p. 417 ss. To the bibliography one might add: E. Sapir, *Language*, New York 1921, pp. 101-102 and 121 (discussion of *a.o.* the sentence *illa alba femina quae venit*).

² Schwyzer, *o.c.*, II, p. 29. A. W. de Groot, *Structural Linguistics and Word Classes*, Lingua I, p. 461.

identical with the so-called substantive gender, although only substantive pairs like *ἐκυρά*—*ἐκυρός* constitute gender categories: because many, but not all, neuter substantives happen to indicate non-living things, it is assumed that the neuter adjectives do the same.

First of all we must observe that the productive diminutive categories contain only neuter substantives, which either indicate persons and animals (*παιδάριον*—*παῖς*, *γυναικάριον*—*γυνή*, etc.) or not (*οἰκίδιον*—*οἰκία*, *βιβλίδιον*—*βιβλίον*, etc.). Moreover, there are also some *non*-dimin. neuters that indicate living beings: *βρέφος* "baby", *τέκνον* "child", *ὄρνεον* "bird", *κῆτος* "whale, sea-monster". On the other hand the masculine and feminine substantives comprise many that refer to non-living things: *ὁ λόγος*, *ἡ ὁδός*. It is of course possible that this distribution goes back to some kind of animistic conception which saw some objects as male, others as female, and still others as inanimate, but such ideas were long forgotten in Hellenistic times: the different kinds of substantive gender were different classes of syntactical combinability.

The assumption that neuter adjectives as such would indicate non-living things is likewise incorrect: in the following N.T. passages the neuter adjectives and participles refer contextually to people:

1 Cor. I 27-28 τὰ μωρὰ τοῦ κόσμου . . . τοὺς σοφοὺς . . . τὰ ἀσθενῆ . . . τὰ ἰσχυρά . . . τὰ ἀγενῆ

Heb. VII 7 τὸ ἔλαττον ὑπὸ τοῦ κρείττονος εὐλογεῖται

Apc. III 2 τὰ λοιπὰ ἃ ἐμελλον ἀποθανεῖν

Classical: Demosthenes VIII 41 πάντα τὰ νῦν συμβεβιασμένα.¹

It is needless to adduce examples of non-living things; the above instances are more important because they enable us to set up the value of neuter gender in independent adjectives as: "reference to non-person(s) or to person(s)". The oppositions between the three categories can be represented as follows:

<i>marked</i>		<i>un-marked</i>
person		non-person or person
<i>marked</i> female	<i>un-marked</i> male or female	Neuter
Feminine	Masculine	

¹ Blass-Debrunner, *o.c.*, *par.* 138.1.

This full system of gender oppositions is restricted to three case-categories, namely to the vocative, nominative and accusative categories; in the remaining cases there is only an opposition between feminine and masculine-neuter, with the exception of the gen. pl. (at least of the productive adjective classes): in this category there are no oppositions of gender.

When the adjective system has only two gender categories, *i.e.* when the adjective is “of two endings,” there is in the vocative, nominative and accusative cases an opposition between masculine-feminine on the one hand and neuter on the other *e.g.* m-f. ἐμψύχους *vs.* n. ἐμψυχα; in the remaining cases there are no gender oppositions.

7.2.2.2. *Dependent Adjectives.* When adjectives are dependent, used as a member of a substantive group, one may ask—just as above with regard to the case-number categories—whether any *value* of gender is still present. In order to make a thorough description we think it necessary to distinguish between substantive groups of which the substantive does not indicate a person or animal (like τοὺς καλοὺς λόγους), and those groups where this is actually the case (like τοὺς πονηροὺς ποιμένας).

As to the former it is obvious that for the historical period of the Greek language a sex value cannot be claimed to be present in the meaning of the dependent adjectives, because—as we have said above—such a value is neither present in the substantives themselves. We have no means of knowing why for instance among the words indicating parts of the body

it is: ἡ μικρὰ χεὶρ (κεφαλὴ, ῥίς),

but: ὁ μικρὸς πούς (σπλήν, ὀφθαλμός),

and: τὸ μικρὸν στόμα (γόνυ, ἦπαρ).

Incidentally, however, some systematic correlation can be observed, for instance: names of trees are feminine, their fruit are denoted by neuters of the same stem: ἄπιος “pear tree” — ἄπιον “pear”, βᾶτος “bramble” — βᾶτον “brambleberry”, μηλέα “apple tree” — μήλον “apple”, συκῇ “fig tree” — σῦκον “fig” (*cf.* in Latin: *pirus*—*pirum*, *prunus*—*prunum*). When tree and fruit are not of the same (linguistic) stem the fruit can be a non-neuter *e.g.* δρῦς or φηγός “oak” but fem. ἡ βάλανος “acorn”.¹ Perhaps this configuration was formed on the analogy of ἡ μητήρ (or γυνή)—τὸ βρέφος “child,

¹ Schwyzer, *o.c.*, II, p. 30.

foetus". For the time being we shall consider such groups as ἡ καλὴ ἄπιος as border line cases of those which consist of adjective plus substantive indicating female persons (like ἡ καλὴ μητὴρ). In all the remaining instances, however, of adjectives connected with substantives that do not indicate persons or animals we think no value of sex is present, but rather a specific syntactical valence. This valence can be circumscribed as: "to be connected with a feminine (resp. masc. or neuter) substantive". The syntagmatical indication furnished by this valence can be very important when two substantives of the same case-number-category but of different gender occur in one sentence e.g. δεῖ οἰκίαν μέγαν κῆπον ἔχειν vs. δεῖ οἰκίαν μεγάλην κῆπον ἔχειν.

With substantives that indicate persons or animals the connected adjectives have a value of sex only when the substantive in question can be both masculine and feminine e.g. ὁ καλὸς ἵππος vs. ἡ καλὴ ἵππος. However, when the substantives as such indicate either of the sexes (γυνή, ταῦρος, λύκος—λύκαινα, and trees in opposition to their neuter fruit) the sex value of the connected adjective seems superfluous, and on the other hand, when the substantive has only one gender as ἡ ἀλώπηξ, ὁ ὀρέυς (ὁ ἀλ., ἡ ὀρ. do not occur) the value of sex is absent; if it must be indicated one uses adjectives like ἄρρην "male" and θῆλυς "female" e.g. ἡ ἀλώπηξ ἡ ἄρρην¹ and ὁ θῆλυς ὀρέυς (Aristotle, *H.A.* 577 b 22). The fact that m-f. ἄρρην belongs to a system of "two endings" and that the masculine θῆλυς is unmarked as opposed to f. θήλεια, makes their combination resp. with a feminine and a masculine substantive not peculiar as Schwyzer seems to think:² compare for instance the following lines from Homer: *Iliad* X 215. . . . εἰν δώσουσι μέλαιναν,

216 θῆλυν,

in which εἰν is first accompanied by the feminine μέλαιναν which makes the sex of the ambivalent εἰς already clear, and next by θῆλυς "female", which is, however, of the masculine gender category! We do not have any instance of combinations like *ἡ ἀρσενικὴ ἀλώπηξ, but we think that they were quite well possible: the gender of ἡ and ἀρσενικὴ would be purely valential since ἀλώπηξ is feminine only, the lexical meaning of ἀρσενικὴ "male" would indicate the biological sex. We think, therefore, that with substantives indicating persons or animals, too, the gender categories of the connected ad-

¹ Schwyzer, *o.c.*, II, p. 31 without mentioning his source.

² *o.c.*, II, p. 31 note 4.

jectives had the syntactical valence “to be connected with a masculine (resp. feminine) substantive”, except when the adjectives are syntactically connected with substantives that may have either gender: δ or η ἵππος, ἄρκος, etc. This valence could likewise be very important as a syntagmatical indication, when two substantives of the same case-number categories but of different gender occur in one sentence, e.g. in εἶδον ἄνδρα κακὸν γυναῖκα πάειν vs. εἶδον ἄνδρα κακὴν γυναῖκα παίειν.

7.2.3. *Syntactical Valence of the Adjective Adverb.* As the description of the syntactical valence belongs to syntax we shall give here only a rough outline. The valence of the adjectival (and pronominal) adverbs ending in -ως implies combinability with:

- a) a verb e.g. Acts XII 11 νῦν οἶδα ἀληθῶς ὅτι . . .
- b) an adjective e.g. Dan. VII 7 (Th) θηρίον . . . ἰσχυρὸν περισσῶς
- c) another adverb e.g. 2 Macc. XV 2 οὕτως ἀγρίως καὶ βαρβάρως ἀπολέσης

d) a word group, or the rest of the sentence in which the adverb occurs e.g. Matt. XXVI 73 ἀληθῶς καὶ σὺ ἐξ αὐτῶν εἶ (sentence adverbial).

The traditional name “modal adverb” or “adverb of manner” covers only part of the uses sub *a*, *b*, *c*, *d*; it does not apply for instance to *d*).

Combination with a substantive is also possible, we know of the following instances: 1 Tim. V 3 τὰς ὄντως χήρας; Dio Chrys. I 38 τοὺς ἀληθῶς βασιλέας, and without the article perhaps in John I 47 ἶδε ἀληθῶς Ἰσραηλίτης “an Israelite in the true sense” cf. Plato, *Phaedo* 66b τοῖς γνησίως φιλοσόφοις and Xenophon, *Hell.* II 3, 38 τοὺς ὁμολογουμένως συκοφάντας.¹ We have the impression that this use is as it were the substantivation of sentences or word groups like ἀληθῶς βασιλεῖς εἰσιν and ἀληθῶς βασιλεῖς ὄντες, but this matter would need a thorough investigation. In our opinion the passage Thuc. VI 80, 5 τὴν αὐτίκα ἀκινδύνως δουλείαν, which is quoted in this connection by Schwyzer, does not belong under the heading of adverb-plus-substantive. The adverb ἀκινδύνως is paralleled by μὴ αἰσχυρῶς in the subsequent phrase τούσδε τε μὴ αἰσχυρῶς δεσπότης λαβεῖν. Both adverbs are epenthetic and have to be connected with λαβεῖν, though ἀκινδύνως may as well belong to the preceding αἰρεῖσθε. This usage is to some extent comparable to that of γάρ in such sentences as Apc. XVII 17 ὁ γὰρ θ(εὸς) ἔδωκεν εἰς τὰς καρδίας αὐτῶν etc.

¹ Cf. Schwyzer, *o.c.*, II, p. 415.

7.2.4. *Values of the Categories of Comparison.* In Classical Attic both the comparative and the superlative could according to context have a value of comparison (a), or a value of degree (b). For instance, the comparative σοφώτερος could mean:

a) surpassing (an)other(s) in the quality indicated by the positive degree σοφός: "wiser" or "too wise" (when the person or thing surpassed is omitted);

b) a rather high degree of the quality indicated by the positive σοφός: "rather wise".¹

The superlative σοφώτατος could mean:

a) surpassing the other members of a group in the quality indicated by the positive σοφός: "wisest";

b) a high degree of the quality indicated by the positive σοφός: "very wise".

In Koine Greek these values are differently distributed over the two categories. The comparative has retained the values which it had in Classical Attic, but in addition to these it has now taken over the value of comparison of the Classical superlative *e.g.* μείζων "greatest" in 1 Cor. XIII 13 νυνὶ δὲ μένει πίστις, ἐλπίς, ἀγάπη, τὰ τρία ταῦτα· μείζων δὲ τούτων ἡ ἀγάπη. It could even have according to context value b) of the Classical superlative *e.g.* John XIII 27 ὁ ποιεῖς ποιήσον τάχιν: "very quickly". This shows that the comparative of Koine Greek had partially supplanted the superlative, which kept being used, but had retained its former value of degree only (as such it is usually called the "elative") *e.g.* Apc. XVIII 12 (mss.) πᾶν σκεῦος ἐκ ξύλου τιμιωτάτου (A: λιθοῦ) : "of very costly wood". On the whole the superlative category tended to become obsolete; in the N.T. writings there are 54 superlatives, of which, however, 12 are μάλιστα, 14 ἐλάχιστος and 13 ὕψιστος. In Modern Greek the superlative is represented by the article plus the comparative *e.g.* ὁ μικρότερος or ὁ πιὸ μικρός "the smallest"; the elative in -τατος is found only in the official language: καλώτατος "very beautiful".²

¹ Moreover, the Classical Attic comparative could have a third value, namely "rather this quality than that" *e.g.* Aristophanes, *Ach.* 1078 ἰὼ στρατηγοὶ πλείονες ἢ βελτίονες "numerous rather than brave". The second comparative in such sentences is seen as a purely formal adaptation to the former (Schwyzer, *o.c.*, II, p. 185; *cf.* for Latin: Kühner-Stegmann, *Lateinische Grammatik*, II, p. 474).

² A. Thumb, *Handbuch der neugriechischen Volkssprache*, Strasbourg, 1910, pp. 68-70.

Blass-Debrunner state the possibility that the change in the system of comparison was due to the influence of Vulgar-Latin; in French and Italian the superlative is likewise represented by article plus comparative, while the forms in *-issime* and *-issimo* have the elative value only.¹

In Koine-Greek the comparative—as far as it expressed comparison—was undoubtedly marked as opposed to the positive category. This appears from the fact that according to context the latter expressed comparison or not: Matt. XVIII 9 καλόν σοί ἐστὶν μονόφθαλμον εἰς τὴν ζωὴν εἰσελθεῖν ἢ δύο ὀφθαλμοὺς ἔχοντα βληθῆναι *etc.* “it is *better* for you to enter life with one eye *than* with two eyes to be thrown” *etc.*; Matt. XXII 36 ποία ἐντολὴ μεγάλη ἐν τῷ νόμῳ “which is the greatest command in the Torah?”²

The positive may also have expressed according to context a rather high or a high degree, in other words we believe that *e.g.* σοφός could also mean “rather wise” and “very wise”, and was therefore unmarked as opposed to the comparative and elative categories.³ It is, however, very difficult to quote any instances that are not open to doubt, as it seems always possible to assume such a pregnant use in a given passage or not. In actual speech it may have been accompanied by a special intonation of some kind, but this is of course only a guess. At any rate the positive had such a value that it could be combined with words expressing a degree themselves, like λίαν “very” in Matt. IV 8 ὄρος ὑψηλόν λίαν “a very high mountain”. In all probability the oppositions between the three categories were then as follows:

<i>marked</i>	<i>unmarked</i>	<i>marked</i>
expressing a degree (“rather”, “very”) or: expressing comparison	expressing a degree (“rather”, “very”) or not expressing comparison or not	expressing a degree (“very”)
Comparative	Positive	Elative

¹ *o.c.*, *par.* 60.1.

² Blass-Debrunner, *o.c.*, *par.* 245. Both these instances reflect the use of the Aramaic or Hebrew adjective which had no categories of comparison. Nevertheless they demonstrate that such a use of the positive degree was possible as it was the unmarked category in opposition to the comparative.

³ Probably also to the compositional adjectives of ‘relative degree’ such as ὑπόλευκος “whitish, somewhat white”. (*cf. par.* 7.5).

7.3. *Forms of the Adjective Categories*

7.3.1. *Survey.* Of the case-number categories we list only the nom.sg. as example (the voc.sg. could not serve as such, as it is absent from the fem. and neuter adjectives). The additions in brackets indicate the substantive declension to which the declension of the adjective is formally identical, except for some accents.

A. *Positive. (Productive)*

	<i>masc.</i>	<i>fem.</i>	<i>neuter</i>	<i>adj.adv.</i>
1a.	δίκαιος (ἄγγελος)	δικαία (ψάλτρια)	δίκαιον (δρέπανον)	δικαίως
1b.	κόκκινος (ἄγγελος)	κοκκίνη (νίκη)	κόκκινον (δρέπανον)	κοκκίνως
2a.	ἄργυροῦς	ἄργυρᾶ (ψάλτρια)	ἄργυροῦν	ἄργυρῶς
2b.	χρυσοῦς	χρυσή (νίκη)	χρυσοῦν	χρυσῶς
3.	m-f. ἀληθής		ἀληθές	ἀληθῶς
(unproductive)				
4.	m-f. ἄρπαξ (φύλαξ)		?	?
5.	m-f. εὐδαίμων (δαίμων)		εὐδαιμον (δόμα)	εὐδαιμόνως
6.	m-f. ἄρσην (ποιμήν)		ἄρσεν (δόμα)	ἄρσένως
7.	μέλας (κλείς)	μέλαινα (θάλασσα)	μέλαν (δόμα)	?
8.	γλυκύς (πῆχυς)	γλυκεῖα (ψάλτρια)	γλυκύ	γλυκῶς

B. *Comparative-Superlative (Productive)*

- a) *ἄτερος etc.* with 1, 6, 7, 8: δίκαιος —δικαιότερος, *ἄα*, -ον; δικαιοτάτος, *ἄη*, -ον; ἄρσέντερος *etc.*, μελάντερος *etc.*, γλυκύτερος *etc.*
- b) *ἄτερος etc.* with 2 and 3: ἀληθής —ἀληθέστερος, *ἄα*, -ον; ἀληθέστατος, *ἄη*, -ον; εὐνούς —εὐνούστερος *etc.*

(unproductive)

- c) *ἔστερος etc.* with 5: εὐδαίμων —εὐδαιμονέστερος *etc.*; εὐδαιμονέστατος *etc.*
- d) *-ίων, ἄιστος* with no special class: ἡδύς —ἡδίων, ἡδιον —ἡδιστος, *ἄη*, -ον.
- e) *ἄων, ἄστος* with no special class: ῥᾶδιος —ῥάων, ῥᾶον —ῥᾶστος, *ἄη*, -ον.

7.3.2. *Remarks. Case-Number Categories.*

Ad 1a-1b: δικαία and κοκκίνη are declined like the substantives ψάλτρια and νίκη, except for two categories: the nom.pl. has antepenult accent δίκαιαι [díkeɛ], κόκκιναι [kókine], and the gen.pl. has penult accent, not final: δικαίων, κοκκίνων. The nom.pl.fem. has, however, penult or final accent when the nom.sg.masc. has penult or final accent; the gen.pl. has final accent when the nom.sg. has final accent: *e.g.* σοφός—σοφή—m.f.n. σοφῶν.

Ad 2a, 2b: for the fem. declension see the survey; the masc. and neut. declension is:

Bases I	ἀργυροῦ	voc.sg. ἀργυροῦ(ς)	[argürú(s)]	I, -s or I
II	ἀργυρ-	nom.sg. ἀργυροῦς	[argürús]	I, -s
		gen.sg. ἀργυροῦ	[argürú]	I
		dat.sg. ἀργυρῷ	[argüró]	II, -o
		acc.sg. ἀργυροῦν	[argürún]	I, -n
		neut. v-n/a.sg. ἀργυροῦν	[argürún]	I, -n
		voc.pl. ἀργυροῖ	[argüroj or -ü]	I, -j or II, -ü
		nom.pl. ἀργυροῖ	idem	idem
		gen.pl. ἀργυρῶν	[argürón]	II, -on
		dat.pl. ἀργυροῖς	[argürojs or -üs]	I, -js or II, -üs
		acc.pl. ἀργυροῖς	[argürús]	I, -s
		neut. v-n/a.pl. ἀργυρᾶ	[argürá]	II, -a
		adj. adverb ἀργυρῶς	[argürós]	II, -os

The voc. sg. is so rare that Schwyzer remarks: “*ein Vokativ zu χρυσοῦς u.ä. ist nicht belegt*”,¹ but we found a late instance in Orphic Hymns V, 3 *πυρίπνου*. The adjectives of this type are mainly transpositions of substantives denoting a material; as such the category is characterized by the element -οῦ-. Sometimes the older uncontracted type ἀργύρεος is still found by the side of ἀργυροῦς, in the Apc. in II, 1 (A, C): *χρυσέων*.

The corresponding substantive type (νοῦς *etc.*) has disappeared from Koine Greek as these substantives went over to the decl. of βοῦς or were replaced, either by quite different words *e.g.* *ὕδατος* by *ὕδωρος*,² or by uncontracted equivalents *e.g.* *ὁστοῦν* by *ὁστέον* (Luke XXIV 39).

The fem. adjectives ἀργυρᾶ and χρυσῇ were so often used together in the same context that they were sometimes adapted to one another: either χρυσῇ became χρυσᾶ *e.g.* Apc. I 13 *χρυσᾶν* (though there is here no ἀργυρᾶ in the context), or ἀργυρᾶ became ἀργυρῇ *e.g.* in Ps-Callisthenes CXXVIII, 19 *τὴν μὲν χρυσῇν, τὴν δὲ ἀργυρῇν*.³

Ad 3.

Bases I	αὐτάρκη	voc.sg. αὐτάρκης	[awtárkes]	I -s (p.a)
II	αὐτάρκε	nom.sg. αὐτάρκης	[awtárkes]	I -s (p.a)
III	αὐτάρκ-	gen.sg. αὐτάρκους	[awtárkus]	III -us (p.a)
		dat.sg. αὐτάρκει	[awtárki]	III -i (p.a)
		acc.sg. αὐτάρκη(v)	[awtárke(n)]	I -n or I (p. a)
		neut. v-n/a.sg. αὐτάρκες	[áwtarkes]	II -s
		n-v.pl. αὐτάρκεις	[awtárkis]	III -is (p.a)
		gen.pl. αὐτάρκων	[awtarkón]	III -on (f.a)

¹ *o.c.*, I, p. 554 note 1.

² Schwyzer, *o.c.*, I, p. 562.

³ Blass-Debrunner, *o.c.*, par. 45.

dat.pl.	αὐτάρκεσιν	[awtárkesin]	II -sin
acc.pl.	αὐτάρκεις	[awtárkis]	III -is (p.a)
neut. v-n/a.pl.	αὐτάρκη	[awtárke]	I -- (p.a)
adj.adv.	αὐταρκῶς	[awtarkós]	III -os (f.a)

The shifts of accent occur when the accent is in principle antepenult (visible in the neut. nom./acc.sg. and in the dat. pl.). With only few exceptions the adjectives of this type are transpositional compounds: ἄ-ληθ-ής, ἄ-βλαβ-ής, εὐ-πρεπ-ής, *etc.* The sg. accusatives αὐτάρκη and αὐτάρκην occurred side by side in Koine-Greek. In the Apc. there is only one instance of the acc.sg.m-f.: I 13 (A) [π]οδηρην. The form of the voc. sg. m-f. is a matter of dispute: in Classical Attic it was αὐταρκες; according to Moulton it is absent in the N.T., as there do not occur any adjective vocatives there except those of type δίκαιε.¹ The grammarian Herodian who lived by the time of Marcus Aurelius says that the Athenians used the nom. sg. for the vocative: ἐπὶ τῶν ἐπιθέτων παρ' αὐτοῖς ὁμόφωνός ἐστιν ἢ κλητικῇ τῇ εὐθείᾳ οἷον ὁ δυστυχής, ὃ δυστυχής, ὡς παρὰ Μενάνδρῳ.² The only possible instance of this usage in the N.T. is ὃ πλήρης (Acts XIII 10); although πλήρης is often used as an indeclinable, this is not the case in the Book of Acts: VI 3 acc. pl. πλήρεις, VI 5 acc. sg. πλήρη (so B, but ~~κ~~, A, C, D: πληρης). From the probably much younger Orphic Hymns which abound in vocatives of all kinds, we have gathered the following data: they contain 14 non-neuter vocatives in -ές (of which 8 *metri causa*) against 50 in -ής (of which 18 *metri causa*); hence there are 6 in -ές against 32 in -ής under conditions where both are metrically allowed.³ A further instance: Origines *Contra Celsum* VI 31 νυκτοφάης δεύτερε Ἰαώ. On the ground of these facts we think it rather precarious to conclude that the Classical m.-f. voc. αὐταρκες still belonged to non-literary Greek in the Imperial period. It is at least remarkable that in these epical hymns—where one might expect archaic forms—the vocatives in -ής outnumber those in -ές. Neuter αὐταρκες is described as “II, -s” *cf.* subst. γένος (*par.* 6.3.1.3.4.3). For the opposition αὐτάρκης—αὐταρκες *cf.* type 6. ἄρσην—ἄρσεν.

¹ *A Grammar of New Testament Greek*, II, Edinburgh, 1919-29, pp. 155-166.

² *Ed. A. Lentz*, Leipsic, 1870, II-2, p. 695.

³ Two of these 6 vocatives in -ες have variant readings in -ης or -η (L4: εὐτραφή), whereas one of the 32 vocatives in -ης has a variant reading in -ες, and one is even due to conjecture (*ed.* G. Quandt, Berlin, 1955), as it is found in the mss as -η only (XXVII 11). These vocatives in -η are comparable to the similar vocatives of type Σωκράτης but they may also be due to a paleographical error: unclear ligature ΕC misread as Η.

Ad 4. Only dental stems such as m.-f. εὐχαρις have a neuter: εὐχαρι. The declension is like that of κλείς: acc. sg. εὐχαριν, or like that of παῖς : φιλόπολις, acc. pl. φιλοπόλιδας (Plato *Resp.* 503a).

Ad 7. Μέλας, gen. sg. μέλανος, but acc. sg. μέλαν; of μέγας the acc. sg. is μέγαν, v-n./a. sg. neut. μέγα, remaining cases μεγάλου, etc., fem. μεγάλη, etc.

Ad 8.

Bases	I γλυκύ-	voc.sg. γλυκύ	[glükú]	I
	II γλυκέ-	nom.sg. γλυκός	[glükás]	I, -s
	III γλυκ<	gen.sg. γλυκέος	[glükéos]	II, -os
		dat.sg. γλυκεῖ	[glükí]	III, -i
		acc.sg. γλυκόν	[glükún]	I, -n
		neut. v-n./a.sg. γλυκύ	[glükú]	I
		nom.pl. γλυκεῖς	[glükís]	III, -is
		gen.pl. γλυκέων	[glükéon]	II, -on
		dat.pl. γλυκέσιν	[glükésin]	II, -sin
		acc.pl. γλυκεῖς	[glükís]	III, -is
		neut. v-n./a.pl. { γλυκέα	[glükéa]	II, -a or III, -e
		γλυκεῖ	[glüké]	
		adverb. γλυκέως	[glükéos]	II, -os

The neuter acc. pl. with basis in -ε is found in Apc. II 24 βαθέα, at least if this word is an adjective and not the uncontracted plural βάθηα of the neuter subst. βάθος.

The neuter adjective ἡμισυ is not always declined in the Hellenistic period: the former nom./acc. ἡμισυ and genitives ἡμισους or ἡμισου are used as indeclinables in the Apc.: XI 9 ἡμέρας τρ(ε)ῖς καὶ ἡμισυ (in A perhaps corrected into ημισου); XI 11 A, N* τρ(ε)ῖς ἡμέρας καὶ ἡμισου, and in XII 14 A καιρὸν καὶ καιροὺς καὶ ἡμισυ καιροῦ (N* ημισου).

7.3.3. Remarks. Categories of Gender

The differences in form and value/valence between e.g. δίκαιος, δικαία and δίκαιον constitute the categories of gender. The masculine and neuter adjectives are different from one another only in the vocative, nominative and accusative categories. The feminine adjectives from the masc.-neuter in all the cases except in the gen. pl., but of the unproductive μέλας and γλυκός the fem. gen. pl. μελαινῶν, γλυκειῶν differ from masc.-neut. μελάνων, γλυκῶν.

The form differences between masculine and neuter adjectives are:

- 1.a-b. masc.voc.sg. δίκαιε, nom.sg. δίκαιος, acc.sg. δίκαιον vs. neut. v-n/a.sg. δίκαιον.
- masc.voc.-nom.pl. δίκαιοι, acc.pl. δικαίους vs. neut. v-n/a.pl. δίκαια.
- 2.a-b. masc.voc.sg. χρυσοῦ, nom.sg. χρυσοῦς, acc.sg. χρυσοῦν vs. neut. v-n/a.sg. χρυσοῦν.

3. masc.-fem.voc.-nom.sg. ἀληθής, acc.sg. ἀληθῆ (v) vs. neut.v.n/a.sg. ἀληθές, masc.-fem.v.n/a.pl. ἀληθεῖς vs. neut.v.n/a. pl. ἀληθῆ
4. a neuter nom./acc.sg. *ἄρπαξ (comparable to Latin n. *fēlix*) is not attested.
- 5-6. masc.-fem.nom.sg. εὐδαίμων, acc.sg. εὐδαίμονα vs. neut.v.n/a.sg. εὐδαιμον
masc.-fem.v-n.pl. εὐδαίμονες, acc.pl. εὐδαίμονας vs. neut.v.n/a.pl. εὐδαίμονα.
masc.-fem.nom.sg. ἄρσην, acc.sg. ἄρσενα vs. neut.v.n/a.sg. ἄρσεν, etc.
7. masc.nom.sg. μέλας, acc.sg. μέλαν vs. neut.n/a. sg. μέλαν
masc.v-n.pl. μέλανες, acc.pl. μέλανας vs. neut.v.n/a.pl. μέλανα
8. masc.voc.sg. γλυκύ, nom.sg. γλυκύς, acc.sg. γλυκύν vs. neut.v.n.a.sg. γλυκύ
masc.voc.-nom/acc.pl. γλυκεῖς vs. neut. v.n/a.pl. γλυκῆ.

The form differences by which the feminine categories differ from the masc.-neut. categories are as follows:

Productive classes (1.a-b. 2.a-b)

Singular categories: -α/-η resp. -α/-η when the masc. nom. sg. has penult or final accent δικαία—δικαίε, κοκκίνη—κοκκίνε, σοφή—σοφέ. The elements -α and -η are in complementary distribution: -α is found when the preceding phoneme is a vowel or /r/, -η is found when the preceding phoneme is a consonant other than /r/ cf. δικαία, ἀργυρᾱ with κοκκίνη, χρυσῆ.

Moreover, the fem. nom. sg. differs from the masc. and neuter nom. sg. by the absence of a final consonant: δικαία vs. δικαίος and δικαίον; on the other hand the fem. gen. sg. differs from the masc.-neut. by the presence of a final consonant: δικαίας vs. δικαίου.

Plural categories: nom. and dat. pl. fem. -αι [ɛ], masc. -οι [o] or [ü], neut. -α [a] and -οι-[o] or [ü]: δικαίαι vs. δικαίοι, δικαία, and δικαίαις vs. δικαίοις; in the gen. pl. there are no differences between the three genders; acc. pl. fem. -α- [a] vs. masc. -ου- [u]: δικαίας vs. δικαίους; acc. pl. fem. -ας [-as] vs. neut. -α [a]: δικαίας vs. δικαία.

Unproductive

7. μέλαινα differs from the masc. and neut. categories by the modification into -αι- [ɛ] of the -α- found in basis μέλαν; moreover, it differs from them by the same differences in the endings which make the declension of subst. θάλασσα distinct from e.g. μάρτυς, μάρτυρος.

8. fem. γλυκεῖα [glükéa] differs from the masc. and neut. categories by ει [e] and moreover, by the same differences in the endings which make the declension of subst. ψάλτρια distinct from πῆχυς and ἄστυ.

7.3.4. *Remarks. Adjective-Adverbs.*

Ad 1a-b: basis δίκαιο- plus [-s] and penult accent: δικάίως [dikéos] (unless the masc. nom. sg. adjective has final accent: ἐρυθρῶς, σοφῶς).

Ad 2-8: apocopated basis (ἀργυρ-, ἀληθ-) or consonant basis (ἐυδαιμον-) plus [-os] and penult accent, unless the masc. nom. sg. adjective has final accent: ἀργυρῶς, χρυσῶς, ἀληθῶς, εὐδαιμόνως.

Ad 9: basis γλυκέ- plus [-os]: γλυκέως.

7.3.5. *Remarks. Comparative and Superlative.*

As to case-number and gender categories the comparatives in -(ε)(σ)τερος belong to adj. class 1-a. δίκαιος, all the superlatives to class 1-b. κόκκινος. The comparatives like μείζων were declined in non-literary Koine-Greek like class 5. εὐδαίμων, but in Atticistic Koine-Greek one may still encounter the Classical Attic acc. sg. m-f. and nom./acc. pl. neut. μείζω and the nom./acc. pl. m-f. μείζους.¹ Comparative and superlative adverbs were exceptional and unproductive e.g. Hebr. II, 1 περισσοτέρως and Aristaeas 19 μεγίστως.

7.4. *Productivity*

The above subdivision has shown that we consider the adjective classes 1-a. δίκαιος, 1-b. κόκκινος, 2-a. ἀργυροῦς, 2-b. χρυσοῦς, and 3. ἀληθής as productive in the Hellenistic period: 1 a-b. amounted to some 27.000 adjective-paradigms (i.e. half of Buck-Petersen's total number of "o-stems", which includes both substantives and adjectives); 2 a-b. amounted to c. 700 and class 3 to c. 6.000 adjective-paradigms.

Of the unproductive classes no figures are available, but class 4. ἄρπαξ comprised a.o. some 240 compounds like λευκόθριξ, εὐόνυξ, μεγάλόδους, class 5. εὐδαίμων some 800 like σῶφρων, εὐγνώμων and words like καυχῆμων, and class 7. μέλας 180 compounds in -πους e.g. m-f. πολύπους (gen. πολύποδος), n. πολύπουν.

Class 8. γλυκός comprised some 250 adjective paradigms if we divide Buck's total number of "υ-stems" into equal halves. We have listed class 5 among the unproductive classes in spite of the rather high number of 800 adjectives; we have done so because the compounds mentioned belong mainly to the poetical language and this holds also for classes 4 and 7.

¹ Cf. G. Mussies, *The Declension of the -(ι)ων Comparatives in New Testament Greek*, *Novum Testamentum* VI 1963, p. 233 ss.

The productivity of the feminine categories in general was restricted by the fact that compounds, and adjectives with the prefixes $\acute{\alpha}$ -/ $\acute{\alpha}\nu$ - and $\delta\upsilon\sigma$ - usually had no feminine declension; instances from the Apc. are: I 16 (II 12) $\acute{\rho}\omicron\mu\phi\alpha\acute{\iota}\alpha$ $\delta\acute{\iota}\sigma\tau\omicron\mu\omicron\varsigma$ and XXI 16 $\pi\acute{\omicron}\lambda\iota\varsigma$. . . $\tau\epsilon\tau\rho\acute{\alpha}\gamma\omega\nu\omicron\varsigma$ (mss.; in A: lacuna). In the Hellenistic period, however, feminine compounds were increasing in number e.g. Matt IV 13 $\tau\eta\nu$ $\pi\alpha\rho\alpha\theta\alpha\lambda\alpha\sigma\sigma\acute{\iota}\alpha\nu$, and on the other hand there were now also *non*-compounds with a common masc.-fem. category e.g. Luke II 13 $\sigma\tau\rho\alpha\tau\iota\acute{\alpha}\varsigma$ $\omicron\upsilon\rho\alpha\nu\acute{\iota}\omicron\upsilon$.

Class 3. $\acute{\alpha}\lambda\eta\theta\acute{\eta}\varsigma$ consisted almost wholly of compounds and lacked therefore special feminine categories; the exceptional simplicia that belong to it can for the greater part be explained as faded compounds e.g. $\omicron\gamma\iota\acute{\eta}\varsigma$ from *idg.** $su-g^w i-és$ "sound-life-ly".

Class 2.a-b was productive only in the positive degree. The comparative and superlative were found only with non-material adjectives like $\epsilon\upsilon\nu\omicron\upsilon\varsigma$, $\acute{\alpha}\pi\lambda\omicron\upsilon\varsigma$; although a "material" cannot be said to be a priori incompatible with comparison the combination hardly occurred.

The unproductive comparatives in $-\acute{\iota}\omega\nu$ and $-\omega\nu$ and the superlatives in $-\acute{\iota}\sigma\tau\omicron\varsigma$ and $-\sigma\tau\omicron\varsigma$ are found in some 40 paradigms. Some of them have no positive degree of the same or of a similar stem, and moreover, the bases of the comparative and superlative may be somewhat different from one another. All this is the case in e.g. $\acute{\omicron}\lambda\acute{\iota}\gamma\omicron\varsigma$ — $\acute{\epsilon}\lambda\acute{\alpha}\sigma\sigma\omega\nu$ — $\acute{\epsilon}\lambda\acute{\alpha}\chi\iota\sigma\tau\omicron\varsigma$. The comparatives in $-\acute{\iota}\omega\nu$ and $-\omega\nu$ tended to be adapted to the productive type $-\tau\epsilon\rho\omicron\varsigma$ e.g. $\mu\epsilon\acute{\iota}\zeta\omicron\nu\alpha$ to $\mu\epsilon\acute{\iota}\zeta\omicron\tau\acute{\epsilon}\rho\alpha\nu$ (3 John 4), or to be replaced e.g. $\kappa\rho\epsilon\acute{\iota}\sigma\sigma\omega\nu$ by $\acute{\alpha}\gamma\alpha\theta\acute{\omega}\tau\epsilon\rho\omicron\varsigma$ (Judges XI 25 B, but A has $\kappa\rho\epsilon\acute{\iota}\sigma\sigma\omega\nu$).¹

7.5. *Morphological Valence*

a) The adjective took part not only in different transpositional categories, but also in a privative category, or perhaps better, a category of negation: $\sigma\omicron\phi\acute{\omicron}\varsigma$ — $\acute{\alpha}\sigma\omicron\phi\omicron\varsigma$ "unwise, stupid", $\kappa\alpha\kappa\acute{\omicron}\varsigma$ — $\acute{\alpha}\kappa\alpha\kappa\omicron\varsigma$ "innocent", $\delta\eta\lambda\omicron\varsigma$ — $\acute{\alpha}\delta\eta\lambda\omicron\varsigma$ "invisible", $\acute{\iota}\sigma\omicron\varsigma$ — $\acute{\alpha}\nu\iota\sigma\omicron\varsigma$ "unequal", etc. The form difference is: $\acute{\alpha}$ - before consonants, $\acute{\alpha}$ - or $\acute{\alpha}\nu$ - before vowels: cf. $\acute{\alpha}\nu\omicron\pi\tau\omicron\varsigma$ by the side of $\acute{\alpha}\sigma\omicron\pi\tau\omicron\varsigma$, and cf. $\acute{\alpha}\omega\tau\omicron\varsigma$ ($\acute{\omega}\tau\alpha$)² with $\acute{\alpha}\nu\omega\mu\omicron\varsigma$ ($\acute{\omega}\mu\omicron\varsigma$), both transpositions from the substantive

¹ Cf. E. Schwyzler, *Ein Nachzügler der griechischen Komparative auf -ων*, Museum Helveticum II 1945, pp. 137-147.

² Perhaps to avoid the meaning "without a back": $*\acute{\alpha}\nu\omega\tau\omicron\varsigma$; cf. $\acute{\alpha}\nu\omicron\acute{\upsilon}\alpha\tau\omicron\varsigma$ which could not be misunderstood (Theocr. Ep. 4, 3).

system; no rule can be given for this variation of *ἀ-* and *ἀν-*; the accent of the masc. nom. sg. is always antepenult. The category was probably productive only with transpositions in *-τός* from the verb system, like *δύναμαι—δυνατός—ἀδύνατος*, but there were also immediate transpositions in *ἀ-----τος* e.g. *ἡθοποιεῖν—ἀνηθοποίητος*; moreover, there were transpositions in *ἀ-----ος* from the substantive system e.g. *ψυχή—ἄψυχος*, *ῥῶτα—ἄωτος*. It is, however, doubtful whether the *non*-transpositions like *ἄσοφος* were productive.

b) Adjectives of the positive degree can be *explicitly* transposed to the substantive and verb systems by special categories e.g. *σοφός* to substantive *σοφία* and to verb *σοφίζειν*; *δίκαιος* to substantives *δικαιοσύνη*, *δικαιότης*, and to verb *δικαιοῦν*, etc. As *implicit* transpositions to the substantive system can be considered those independent adjectives which have assumed a specific meaning, for instance in the Apc.: I 17 *δεξιάν* “right hand” (cf. I 16), IX 11 *τῇ Ἑλληνικῇ* “the Greek language”, XVIII 21 *μύλινον* “mill stone”.

Comparatives and superlatives are transposed only incidentally. An explicit transposition is *μέγιστος—μεγιστᾶνες* “grandees” (Apc. VI 15, XVIII 23); an implicit transposition is *πρεσβύτερος* (Apc. IV 4 etc.) “elder, alderman”.

c) We shall make special mention of only one of the compositional categories, as it is equivalent to a non-compositional category in many other languages, namely the category expressing the relative degree of the quality etc. indicated by the positive degree: *λευκός—ὑπόλευκος* “whitish”, “somewhat white”, and so: *ὑπομέλας, ὑπόξανθος, ὑπόχλωρος, ὑπόψαρος* (“somewhat dappled”).¹

7.6. Peculiarities in the Apocalypse

7.6.1. *Use of the Adjective System.* Of the adjective adverbs the Apc. contains only two different instances: *εὐθέως* (IV 2) and *πν(ευματ)ικῶς* (XI 8). This rather low frequency is certainly due to the fact that neither Hebrew nor Aramaic possessed productive categories of adverbs in their adjective systems.² The author was not familiar with such a category and consequently made little use of it. The same holds good of the pronominal adverbs in *-ως*, except for *ὥς* and *οὕτως* which are frequently used and represent

¹ Cf. Latin *albus-albulus, niger-nigellus, etc.*

² See Gesenius-Kautzsch, *o.c.*, p. 305, and Dalman, *o.c.*, pp. 208-212.

the Hebrew and Aramaic prefix פְּ , and adv. כֵּן resp.; for the rest only the (pronominal) adverb ὁμοίως (II 15, VIII 12) is found.

The Apc. is likewise extremely poor in comparatives and superlatives. There happen to be only one comparative: πλίσονα (II 19, with value of comparison), and two superlatives: τιμιωτάτου (XVIII 12) and τιμιωτάτω (XXI 11, both with elative value). This low frequency may also be explained from the absence of categories of comparison in the Hebrew-Aramaic adjective system. As is well known these languages rendered the notion of comparison by the adjective followed by a prepositional group, a usage which was sometimes literally translated into Greek *e.g.* Exodus XVIII 11 $\text{μέγας κύριος παρὰ πάντας τοὺς θεοὺς}$ "the Lord is greater than all gods"; *cf.* Matt. XVIII 9, XXII 36, and from a later period: Narratio Zosimi *ch.* VI, X and XI $\text{γλυκὺ ὑπὲρ τὸ μέλι}$.¹ It is remarkable that such Semitisms as the latter which could somehow be expected, are wholly absent from the Apc.

7.6.2. *Concord.* Peculiarities of Case have been dealt with in *parr.* 6.2.4.2-6 and 12.3.2.3.1 together with those of the substantives and participles. Incongruities of number and gender can mainly be explained as constructions *ad sensum*. In the field of number we have only two instances: VII 9 $\text{ὄχλον πολλόν . . . ἐστῶτες}$, and XIX 1 $\text{ὄχλου πολλοῦ . . . λεγόντων}$.

If we leave aside such ambivalent instances as IV 7 ζῶον ἔχον (for ἔχον , which may be explained from the phonetic equivalence of o and $\text{\omega}$ (*cf.* also IV 8, V 6, XI 7, XIII 14, XXI 14), the incongruities of gender can be divided as follows:

a) Neuter and feminine words, which in apocalyptic literature symbolize male persons, ἀκρίς , ἀρνίον , θηρίον , κέρας , λυχνία , πνεῦμα , may be accompanied by masculine adjectives or participles, or be referred to by masculine pronouns: V 12 $\text{ἄξιός ἐστιν τὸ ἀρνίον}$ (*i.e.* Christ), XI 4 $\text{οὗτοί (the two witnesses, Moses and Elijah) εἰσιν . . . αἱ δύο λυχνίαι αἱ ἐνώπιον κυρίου τῆς γῆς ἐστῶτες}$, and so V 6, IX 5, XIII 8, 14, XVII 3, 11, 16.

b) The same holds good of words indicating collections of persons, στράτευμα , ἔθνος , χιλιάς , μυριάς , or important aspects of persons, φωνή , ψυχή , ὄνομα , *e.g.* III 4 $\text{ὀνόματα . . . ἄξιοι εἰσιν}$, and XIX 14 $\text{στρατεύματα . . . ἐνδεδυμένοι}$ (II 26-27, IV 1, V 12, VI 9-11, VII 4, 8, IX 13-14, XI 15). A combination of headings a) and b) in IX 7

¹ M. R. James, Texts and Studies II, Cambridge 1891, *pp.* 100, 103, 104; *cf.* Psalm XVIII(XIX) 10 and Sirach XXIV 20.

(**κ**) τὰ ὁμοιώματα τῶν ἀκρίδων ὅμοιοι ἵπποις (A : ὁμοιώματα ἵπποις). We may also discuss here XIV 19 (A) τὴν ληνὸν τοῦ θυμοῦ τοῦ θεοῦ τὸν μέγα (*mss.* μεγαν, **κ** την μεγαλην, P47 του μεγαλου); the gender of μέγα is probably in accordance with θυμοῦ, or perhaps even with θεοῦ. Cf. XIX 20 τὴν λίμνην τοῦ πυρὸς τῆς καιομένης, where it is the category of case that is in accordance with the more important component of the word group.

It is difficult to say whether IV 3 ἴ{ε}ρ{ε}ις (*i.e.* ἱρις) . . . ὅμοιος δράσει σμαραγδίνῳ belongs here, too. It has been remarked that the adjective ὅμοιος may have two genders only, masc.-fem. and neuter,¹ but in the Apc. the feminine ὁμοία does occur a number of times *e.g.* at IV 6. As ὅμοιος is sometimes attracted in case, number and gender to its complement, there is the slight chance that the masc. gender has been taken over from σμαραγδίνῳ (*sc.* λίθῳ); here the word δράσει is not the complement, but seems to be used as a dative of restriction *cf.* the preceding (A) καὶ ὁ καθήμενος ὅμοιος δράσει λίθῳ ἰάσπιδι καὶ σαρκίῳ “and the Sitting One was in appearance like . . .” or perhaps “to the (human) eye the Sitting One was like”. Ezekiel, however, whose first chapter has been the model of Apc. IV uses δρασὶς with the genitive: Ez. I 26 ὡς δρασὶς λίθου σαπφείρου, and I 28 ὡς δρασὶς τόξου (*i.e.* ἔρεως). In the Apc. attraction of the complement (by the side of the grammatically correct use) is found in I 13 (**κ**) εἶδον . . . ὅμοιον υἱὸν ἀνθρώπου (A: [ο]μοιωμα υἱῷ) and in XIV 14 (A, **κ**) καὶ (ε)ἶδον . . . καθήμενον ὅμοιον υ(ιδ)ν ἀν(θρώπ)ου. For this usage we may compare Narratio Zosimi *ch.* V πρεσβῦται ὅμοιοι υἱοὶ θεοῦ (B: ὁμοιοι υἱῷ τῷ θεῷ), but in Apc. IX 10 (A, **κ**) καὶ ἔχουσιν οὐρὰς ὁμοίοις σκορπίοις the attraction is reversed: the dative σκορπίοις depends on ὅμοιος as such, whatever its case, but now the adjective has been attracted *to* the dative case of the complement.² These attractions may perhaps be explained from the fact that in Hebrew and Aramaic כִּדְּ “like” formed one word with the following substantive. This could induce the idea that ὅμοιος and its complement had to show grammatical concord.

c) Unclear is V 13(**κ**) πᾶν κτίσμα . . . καὶ τὰ ἐν αὐτοῖς πάντα ἔχουσα λέγοντας (A: λεγοντα). As appositions rather than incongruities we consider:

¹ Blass-Debrunner, *o.c.*, *par.* 59, 2, questioningly.

² Texts and Studies II, Cambridge 1891, *p.* 99. At Apc. IX 10 the grammatically correct acc.pl.fem. is found in *mss.* 025 and 046.

XII 5 καὶ ἔτεκεν υἱόν, ἄρσεν "and she bore a son, a male child",
cf. Isaiah LXVI 7 ἐξέφυγεν καὶ ἔτεκεν ἄρσεν, Jeremiah XX 15
 ἐτέχθη σοι ἄρσεν.

XIV 3 αἱ ἑκατὸν τεσσαράκοντα τέσσαρες χιλιάδες, οἱ ἡγορασμένοι.

XVI 3 πᾶσα ψυχὴ{ς} ζωῆς ἀπέθανεν, τὰ ἐν τῇ θαλάσῃ.

CHAPTER EIGHT

PROPER NAMES

8.1. *Introduction*

The Greek proper names are treated of as a separate word class because they constitute special systems of categories with form characteristics of their own in some of the subclasses.¹ The most striking property, however, of names is the special nature of their meaning: names merely serve to distinguish *individual* things which belong to the same kind from one another: persons, places, mountains, rivers, ships, months, *etc.* The meaning of proper names is therefore *identificational*. As is well known, this does not imply, that all individuals bear different names: in the Hellenistic period for instance many contemporary persons were called Πτολεμαῖος, but all these persons had no characteristic in common because of which they were called that name: they did not form a special group which should be distinguished from other groups.

One might object that the meaning of a name is not identificational only. Many names, if not all, were originally given because of a possessed or desired quality and many names are still given for a special reason. For instance, the Cretan harbour Καλοὶ Λιμένες (Acts XXVII 8) was undoubtedly called so because it was a good harbour, and the name Πτολεμαῖος was—at least originally—given to a boy because his parents wanted him to become a valiant warrior. “Good Harbour” and “Warlike” are even considered to be as such the meanings of these names. All this is only partly true. We maintain that as soon as *e.g.* καλοὶ λιμένες indicates, besides a good harbour in general, also a unique geographical place where a good harbour is found, it does in the latter case not refer primarily to the nature of that place, but to its individuality. The word group καλοὶ λιμένες has now been (implicitly) transposed to the class of proper names, to Καλοὶ Λιμένες. As long as the meaning of the trans-

¹ See J. Kuryłowicz, *La position linguistique du nom propre*, Esquisses linguistiques, Wrocław-Krakow 1960, pp. 182-192; H. S. Sørensen, *The Meaning of Proper Names*, Copenhagen 1963; O. Leys, *De eigennamen als linguistisch teken* (i.e. The Proper Name as a Linguistic Sign), Meded. Ver. Naamkunde Leuven en Commissie Naamkunde Amsterdam, 41, 1965, pp. 1-81.

posed appellative is still relevant to some degree, the transposition to the name class is not wholly complete. Such incomplete transpositions occur mainly under two circumstances:

a) It is explained why a certain name is or was given, or the act of transposition is as it were described as such. The instances found in the Apocalypse are:

VI 8 ὁ καθήμενος ἐπάνω αὐτοῦ ὄνομα αὐτοῦ ὁ Ἀθάνατος (so A; mss. Θανατος).

VIII 11 καὶ τὸ ὄνομα τοῦ ἁ[στέ]ρος λέγεται ὁ Ἀψινθος

IX 11 καὶ ἐν τῇ Ἑλληνικῇ ὄνομα ἔχει Ἀπολλύων

XIX 13 καὶ κέκληται τὸ ὄνομα αὐτοῦ ὁ Λόγος τοῦ Θ(εο)ῦ

XIX 16 καὶ ἔχει . . . ὄνομα γεγραμμένον Βασιλεὺς Βασιλέων καὶ Κ(ύριο)ς Κυρίων.

b) The name is the object of a word play. Such a word play may be in line with the meaning of the transposed appellative, for instance when someone would remark on Καλοὶ Λιμένες, that although the place had such a favourable name his ship was wrecked there. The name can also be given an explanation which is quite different from the meaning of the transposed appellative *e.g.* Hdt. III 62 Πρήξασπες, οὕτω μοι διέπρηξας τό τοι προσέθηκα πρήγμα; This Persian name which may be explained as “possessing excellent horses”, has here been connected with πρήσσειν by popular etymology. Besides the implicit transpositions there were also explicit ones, such as the woman’s name Μυρτώ, which is transposed from subst. μύρτος “myrtle”.

Moreover, there occur names that cannot be considered to be transpositions. These can be divided into:

a) Names that have been transposed appellatives in the past, but can no longer be recognized as such, due to linguistic change *e.g.* Ζεύς;

b) Names that have been borrowed from foreign languages *e.g.* Λουκιανός. From the morphological point of view, however, it seems relevant only to divide the class of the proper names into two systems, which happen to run parallel with a differentiation according to the things named:

(1) Names constituting a paradigm of five (case-)categories: names of non-persons, mainly geographical names;

(2) Names constituting a paradigm of ten categories (five case categories doubled by the categories of “official name” *vs.* “call name”): names of persons.

8.2. *Names of Non-Persons*

Besides geographical names this class comprises names of months, days, feasts and ships. There are no special types of declension;¹ implicit transpositions like Καλοὶ Λιμένες are declined in the same way as the transposed appellatives, hence gen. Καλῶν Λιμένων, *etc.*; nom. Κροκοδιλόπολις, gen. Κροκοδιλοπόλεως, *etc.*

In the same way all explicit transpositions like Τιβεριάς, Καισάρεια are declined according to some formally corresponding type of substantive or adjective declension, and this holds also good of non-transpositions like Κόρινθος, Μυκῆναι, *etc.* Indeclinables are found only among foreign names *e.g.* Βηθλέεμ, Καπερναούμ. Transpositional categories which do not have a counterpart in the substantive or adjective class do not occur, with the exception perhaps of those which involve such accentual differences as between Νίκαια feminine name of a town, (transposed from the personal name Νίκαια, wife of Lysimachus, which is in its turn an explicit transposition from νίκη), and the fem. adjective νικαία, also transposed from νίκη, but with penult accent.

The most frequent name types, therefore, can only have been those which corresponded formally with the productive substantive declensions ἄγγελος—δρέπανον, ψάλτρια—νίκη—θάλασσα, and φύλαξ—δαίμων (except for the subtype ῥήτωρ). We cannot make but these vague remarks as there are no countings of geographical names.

Categories of number are only seemingly present in the rare contexts which mention two towns bearing the same name, for instance Νεάπολις in Italy and Νεάπολις in Macedonia. However, a word like Νεαπόλεις is in our opinion not the plural to either of these names. It has rather the meaning "*towns called Neapolis*", and is therefore the plural to the singular Νεάπολις meaning "*a town called Neapolis*", which we consider as a transposition back to the substantive system. Names in the proper sense *i.e.* with identificational meaning do therefore not take part in categories of number and are consequently singularia or pluralia tantum: Σπάρτη, Ἀθήναι, Δελφοί. The latter can, however, be treated syntactically as singulars *e.g.* Acts XVI 12 Φιλίππους ἥτις ἐστὶν πρώτη

¹ The declension of Semitic place names ending in -α wavers between types ψάλτρια-θάλασσα and δρέπανον *e.g.* Γόμορρα: gen. Γομόρρας (2 Pet. II 6) or Γομόρρων (Matt. X 15).

τῆς μερίδος Μακεδονίας πόλις. The different case valences of geographical names are not different from those of substantives.

The morphological valence comprises several transpositional categories, for instance, to the adjective system Κόρινθος—Κορίνθιος, -ία, -ιον, and to the substantive system Ἀβδηρα—Ἀβδηρίτης, Μέγαρα—Μεγαρεύς (*par.* 8.4).

8.3. *Personal Names*

8.3.1. *Introduction and Survey.* These names constitute systems of at least ten categories combining five case categories and two others, namely the categories of *official name* and *call name*. Just as the geographical names the personal names have no categories of number. In a sentence like δύο Πλάτωναες ἐγένοντο we consider Πλάτωναες as a plural substantive meaning “*persons called Plato*”, and so Πτολεμαῖοι in Polybius XXXI, 10, 1 (*ed.* Paton) μετὰ τὸ μερίσαι τοὺς Πτολεμαίους τὴν βασιλείαν. Slightly different are such plurals as found in Dio Chrys. LXXIV 14 Ἀερόπας μὲν γε καὶ Κλυταίμνηστρας καὶ Σθενεβοίας οὐδὲ εἰπεῖν ἔστιν. These words have the meaning “*persons like Clytaemnestra*” etc. Like Πλάτωναες we consider them to be transpositions back to the substantive class (*cf.* Νεαπόλεις above).

Gender categories are present, but the opposition between *e.g.* Φίλος and Φίλη is different from that between the adjectives φίλος and φίλη. Just as φίλη the name Φίλη indicates a female person, but unlike the unmarked φίλος, the name Φίλος has the value “*positively male*”. The opposition between Φίλη and Φίλος is therefore polar: both have a positive value. The implicit transposition of masc. adjectives to the class of masc. names always involves this slight change in value, and the same can be observed with regard to explicit transpositions, such as φίλος—Φίλων, which likewise has the value of being exclusively a man’s name. As the masc. and fem. transpositions do not always belong together in special pairs it cannot be said that gender categories are present in the system of personal names to the same degree as in the adjective system. Nevertheless there are some fixed combinations of masc. names and fem. names. Those ending in -ος always seem to have a fem. counterpart ending in -α- or -η; likewise names like Σωκράτης and Ἡρακλῆς have fem. pendants ending in -εια and -κλεια. If we consider such pairs as categories of gender or rather of sex, the system of the personal names in its most extensive form would be as follows:

	<i>man's name</i>	<i>woman's name</i>
official name	v. 'Αρτεμίδωρε n. 'Αρτεμίδωρος g. 'Αρτεμίδωρου d. 'Αρτεμίδωρφ a. 'Αρτεμίδωρον	'Αρτεμιδώρα 'Αρτεμιδώρα 'Αρτεμιδώρας 'Αρτεμιδώρα 'Αρτεμιδώραν
call name	v. 'Αρτεμᾶ n. 'Αρτεμᾶς g. 'Αρτεμᾶ d. 'Αρτεμᾶ a. 'Αρτεμᾶν	— 'Αρτεμώ 'Αρτεμοῦς 'Αρτεμοῖ or -μοῦ 'Αρτεμώ or -μοῦν

8.3.2. *Values and Valence.* As we have said above the difference between 'Αρτεμίδωρος and 'Αρτεμιδώρα cannot be described as unmarked *vs.* marked. It is true that for instance a brother and sister called resp. Αὐρήλιος Πολέμων and Αὐρηλία'Ισιδώρα could be referred to as Αὐρήλιοι Πολέμων καὶ 'Ισιδώρα, but in our opinion this Αὐρήλιοι is rather to be evaluated as the name of a group like the *Iulii*, *Cornelii*, etc. Such names will be discussed with the ethnic adjectives (8.4).

As to 'Αρτεμᾶς and 'Αρτεμώ: the value of these categories in the Hellenistic period is to oppose their members as short colloquial names against the longer, official and somewhat ceremonial names 'Αρτεμίδωρος and 'Αρτεμιδώρα. We have termed them therefore the categories of call names. Some instances:

masc.	Λουκιανός	— Λουκᾶς
	'Επαφρόδιτος	— 'Επαφρᾶς
	'Αντίπατρος	— 'Αντιπᾶς
	Πατρόβιος	— Πατροβᾶς
fem.	'Επαφροδίτη	— 'Επαφρώ
	Κλεοπάτρα	— Κλεώ
	Χαρίκλεια	— Χαρικλώ
	Ξανθίππη	— Ξανθώ (resp. in Anth. Pal. 5, 131, 2 and 5, 4, 5).

These categories were in all probability productive in the Hellenistic period. Both comprised also some transpositions: γόνατα — Γονατᾶς,¹ βρίμη — Βριμώ. A most curious instance is Μωσώ, the

¹ Cf. W. W. Tarn, *Antigonos Gonatas*, Oxford repr. 1969, p. 15 n. 1.

fem. counterpart to Moses, whom Alexander Polyhistor in his account has turned into some kind of Sibyl (Suidas *s.v.* Ἀλέξανδρος ὁ Μιλήσιος).

According to Schulze the feminine counterpart of the names in -ᾱς was the declension -οῦς, -οῦτος, -οῦτι, -οῦν, of which he had 45 instances by the time when he wrote his paper, especially from Egypt and Lycia.¹ This type would have replaced that in -ῶ.² As far as Ptolemaic Egypt is concerned we must point to the fact that the majority of such names in -οῦς were masculine,³ but later on the two feminine types may have coexisted for some time. In Modern Greek -ῶ is restricted to fem. personal names *e.g.* Ἀγαθῶ (but also Φρόσω) by the side of masc. -άκης *e.g.* Δημητράκης, whereas -οῦ (gen. -οῦς) is found in fem. nomina agentis *e.g.* φαγοῦ "gourmet" by the side of mascul. formations in -ᾱς: φαγᾱς. The whole question is not easy to judge by the fact that women's names are far less frequent in inscriptions, *etc.* than men's names:⁴ in the N.T. writings 38 feminine names are found, of which only 14 are Greek.

The above declension of Ἀρτεμῶ is based on the data furnished by Bondesson.⁵ A reorganization of the older paradigm -οῖ, -ῶ, -οῦς, -οῖ, -ῶ (or -ῶ) was necessitated only after the phonetic value of οἰ in the vocative and dative cases had changed from [oj] to [ü], and as we have seen above (*parr.* 3.3.2 and 3.4.3), this change did probably not take place in Asia Minor before the end of the first century A.D. The only "measure" to be taken so as to restore congruity within the paradigm was to introduce a dative in -οῦ, not mentioned by Bondesson, but attested in Cibyra 145 A.D.⁶ The special vocative could easily be dropped as its task could also be performed by the nominative; the accusative in -οῦν had existed by the side of -ῶ since Herodotus.

8.3.3. *Forms of the Personal Names.* There are four classes of names which constitute special types of declension and were in all

¹ *Kleine Schriften*, Göttingen, 1933, *pp.* 308-309.

² Cf. A. Morpurgo Davies, *Gender and the Development of the Greek Declensions*, Transactions Philol. Soc. 1968, Oxford 1969, *pp.* 28-31.

³ Mayser, *o.c.* I-2, *pp.* 34-35.

⁴ Morpurgo Davies, *o.c.*, *p.* 28.

⁵ *o.c.*, *pp.* 149-150.

⁶ R. Cagnat, *Inscr. Graecae ad Res Romanas pertinentes*, vol. IV 921. An alternative form of the dative had been introduced in earlier times: τῇ Λητῶι (O.G.I.S. 746, Xanthus, *c.* 197 B.C.), which became later on phonetically identical to the nominative, both [-ῶ].

probability productive in the Hellenistic period. The remaining personal names are declined in accordance with one of the substantive or adjective declensions. As to the category of the call names we have not found it possible to formulate a rule according to which they are formed on the basis of their official counterparts. The latter are shortened, it is true, but for instance a name like 'Ασκληπιιάδης may be shortened to 'Ασκληπιᾶς or to 'Ασκληᾶς.

The special types of proper name declension are:

8.3.3.1. Type 'Αρτεμᾶς (For the declension see 8.3.2.). To this type belong, besides the names ending in -ᾶς, the following masculine names:

foreign names in -ας, with penult accent	: 'Ιούδας
names in -ῆς, except those in -κλῆς	: Μανασσῆς
names in -ίς	: Λεύις
names in -οῦς	: 'Ιησοῦς
names in -ῶς	: 'Απολλῶς

The vocative, genitive and dative are phonetically identical and can be considered as the basis; the nominative and accusative must then be described as: basis plus [-s], and basis plus [-n].

The corresponding substantive type *e.g.* ἀτταγᾶς, ἐλεᾶς has not been included in our description of the substantive system, as it was obsolete in the first century A.D. It is true that there were formed a number of new words like κλειδᾶς, μαχαιρᾶς, ὀρνιθᾶς which indicate professions, but these begin to appear somewhat later, towards the end of the second century. Βορρᾶς may be considered as a personal or as a geographical name, Σατανᾶς is of course a personal name.

Especially in Ptolemaic Egypt the names which belong elsewhere to this type are declined in a different way, namely according to the declension of the substantive κλείς (6.3.1.3.5.2), in which a vowel basis and a dental basis vary *e.g.* Βησᾶ—Βησᾶς—Βησᾶτος—Βησᾶτι—Βησᾶν, Σάραπι—Σάραπις—Σαράπιδος, *etc.*, and so numerous other Egyptian names, both masculine and feminine, ending in -αῦς, -εῦς, -ῆς, -οῦς, -ῶς.¹

8.3.3.2. Type 'Ιωάννης. The declension of these names differs from that of substantives like πολίτης (6.3.1.2.1) in the vocative only: 'Ιωάννη *vs.* πολῖτα. In the Hellenistic period there was much uncertainty in the genitive ending: it often ended in -ους (*cf.*

¹ Mayser, *o.c.* I-2, *pp.* 32 and 35.

Σωκράτους and adj. αὐτάρκους) instead of in -ου. The majority of the names belonging to this type were in -ίδης, -άδης, -ιάδης.

- 8.3.3.3. Type Ἡρακλῆς: voc. Ἡρακλῆ
 nom. Ἡρακλῆς
 gen. Ἡρακλέους
 dat. Ἡρακλεῖ
 acc. Ἡρακλῆν

This type comprises transpositional compounds of which the second element is -κλῆς. It differs from names like Σωκράτης (which followed the declension of adj. αὐτάρκης) in the genitive only: Ἡρακλέους *vs.* Σωκράτους. The vocative is uncertain in this period; Herodian (c. 180 A.D.) says that it was identical to the nominative: ποιοῦσιν οἱ Ἀθηναῖοι τὴν αὐτὴν ὀρθὴν καὶ κλητικὴν οἷον ὁ Νικοκλῆς, ὃ Νικοκλῆς.¹ On the other hand Hatzidakis has collected a number of instances of vocatives ending in -κλῆ.² It seems, however, safe to conclude that at any rate the Classical Attic form Ἡράκλεις had disappeared.

8.3.3.4. Type Ἀρτεμώ (for the declension see 8.3.2). In Classical Attic the vocative was Ἀρτεμοῖ [-όj], but it is doubtful whether this form was still in use in the Hellenistic period. In Orphic Hymns 69, 2 we find a nominative used as a vocative: Ἀλληκτώ. The dative Ἀρτεμοῖ and accusative Ἀρτεμώ were probably Atticistic as against Ἀρτεμοῦ and Ἀρτεμοῦν. Names of this type are not found in the N.T., but were used *a.o.* in Asia Minor in the Imperial period.³ The substantive counterparts had become obsolete: ἡχώ "echo" went over to type τεῖχος: ἥχος.

8.3.4. *Productivity and Morphological Valence.*

The productivity of the different types of name declension can best be discussed together with the productivity of the transpositional/derivational categories involved.

8.3.4.1. *Implicit Transpositions.* Most kinds of substantives and adjectives can be implicitly transposed to the class of the personal names. As far as we can see there are the following exceptions to this rule: neuter substantives cannot be transposed unless they belong to the diminutive category: φιλημάτιον—*f.* Φιλημάτιον;⁴

¹ Ed. A. Lentz, Leipsic 1870, II-2 p. 695.

² G. N. Hatzidakis, *Zur neugriechischen declination*, Kuhn's Zeitschr. 32, 1893, p. 425.

³ Neither were names of the type Σωκράτης due to the mainly Semitic cultural background.

⁴ Such transpositions—which never have penult accent—are feminine in gender *e.g.* Menander *frag.* 951, 15 (Koerte) τὴν Δόρυ[ον].

neuter adjectives are not transposed at all; adjectives of type *αὐτάρκης* are implicitly transposed only when they have penult accent; the finally accented adjectives of this type take on the penult accent and are therefore explicit transpositions *e.g.* *εὐμενής*—*Εὐμένης*.

It has been remarked above that transposition to the class of personal names involves a specification according to sex, feminine adjectives being transposed to women's names, the unmarked masculine adjectives to men's names *e.g.* *φίλη*—*Φίλη*, *φίλος*—*Φίλος*. Substantives belonging to a declension which contains a majority of masculine words (which is a matter of syntactical combinability) are transposed only to the class of men's names. *e.g.* *σάτυρος*—*Σάτυρος*. The few substantives that have a gender deviating from the majority, for instance *ἡ πάρθενος* in type *ἄγγελος*, cannot as such be transposed to the class of women's names, unless by explicit transposition: *πάρθενος*—*Παρθενία*. Likewise the mainly feminine substantives furnish women's names only: *μέλισσα*—*Μέλισσα*.

Transgressions of this rule have a connotation of mockery *e.g.* *ἡ ἀντίστασις* transposed to *ὁ Ἀντίστασις*, and are therefore rather based on the rule than exceptions to it.¹

8.3.4.2. *Explicit Transpositions and Derivations*. As there do not exist to my knowledge any countings of personal names, the following survey will be only impressionistic. It is based on Dornseiff-Hansen's reversed dictionary of Greek proper names,² which is not easy to consult as the authors have not kept the personal names apart from the ethnics (see *par.* 8.4). The most important categories seem to have been the following:

MEN'S NAMES		
<i>Probably Productive:</i>	<i>Form Characteristic:</i>	<i>Transposed / Derived from:</i>
Θάλασσος	-ο-	θάλασσα
Ἀδελφίος	-ιο-	ἀδελφός
Ξεναῖος	-αῖο-	ξένος
Πολεμωνιανός	-ιανό-	Πολεμών
Νικίας	-ια-	Νικ(ο)-, νίκη ³
Ἀριστίδης	-ίδη- (also -ίδα-)	*Α/ἄριστος
Ἀσκληπιάδης	-άδη- (after ι)	Ἀσκληπιός

¹ Schwyzer, *o.c.* II, p. 37.

² *Rückläufiges Wörterbuch der griechischen Eigennamen*, Ber. Verh. Sächs. Ak. Wiss. Phil.-hist. Kl. 102, 4. Berlin 1957.

³ Either a derivation from some compound name with Νικ(ο)- or a direct transposition of νίκη. Probably unproductive were such names as Ἀρέτας (ἀρετή), Ἀνδρέας (ἀνήρ—ἀνδρός).

'Αρτεμᾶς	-ᾶ-	'Αρτεμίδωρος
Γλύκων	-ων	γλυκύς
Χρυσίων	-ίων	χρυσός
Μεγιστεύς	-εύ-	μέγιστος
Σωκράτης	-η-	σῶος and κράτος ¹
Βόηθος	antepenult acc.	βοηθός

WOMEN'S NAMES

<i>Productive</i>		
Σατύρα	-α (also -ία, -αία)	Σ/σάτυρος
Γλύκη	-η (after cons.) (also -ιανή)	γλυκύς
Σωκράτεια	-εια	Σωκράτης
'Ιππώ	-ώ	'Ιππο(νίκη)
Καλλίστιον	-ιον (also -άριον, -ίδιον)	Κ/καλλίστη
Βασίλης, -ίδος	-ίδ-	βασιλεύς
'Ολυμπιάς, -άδος	-άδ - (after ι)	'Ολυμπιά(δωρος).

It is not always possible to determine with certainty whether a name is transpositional or derivational *i.e.* formed on the basis of another name, except for those in -ᾶς and -ώ, which are usually derivations. The following names, for instance, may, from the synchronical point of view, be regarded either as explicit transpositions of the adjectives ἄριστος/ἄριστη, or as derivations from the names 'Αριστος/'Αρίστη: 'Αρισταῖος, 'Αρίστας, 'Αριστέας, 'Αριστ(ε)ίδης, 'Αριστεύς, 'Αριστηνός, 'Αρίστης, 'Αριστίας, 'Αριστῖνος, 'Αρίστιον, 'Αριστίων, 'Αρίστυλλα, 'Αρίστυλλος.² The form differences between all these names (except -ᾶς/-ώ) are not correlated with differences in value; their function merely may have been to increase the number of distinct "labels". The exceptions mentioned are correlated with the value of "call name" (*par.* 8.3.2); an unproductive subtype of call names were those in -ῶς *e.g.* 'Απολλῶς in Acts XVIII 24, by the side of the official 'Απολλώνιος, which is actually found in Acts XVIII 24 (D).

Several of these transpositional/derivational categories may originally have had the value of a call name. Νικίας was at first short for some name beginning with Νικ(ο)-, but this value soon faded, and names in -ίας were often given as such to newly born children: the famous Νικίας (*d.* 413 B.C.). probably never had any other name; his father and son, however, both had the "full" name Νικήρατος.

¹ When adjectives like εὐμενής were transposed, their accent was changed: Εὐμένης with penult accent because of the η in the final syllable, but *cf.* βοηθός—Βόηθος.

² Only a detailed historical investigation may shed some light on the interrelationships of all these names.

It is difficult to say whether the personal names could take part in the diminutive categories in a productive way. Instances like Σωκρατίδιον, Δημίδιον (both in Aristophanes) seem to have been restricted to the vocative case.¹ Women's names like Φιλημάτιον (the implicit transposition of φιλημάτιον) are different because they were not used by the side of non-diminutive names. Φιλημάτιον is a transposed diminutive, not the diminutive to *Φίλημα, in the same way as Ἀρίστιον may be considered to belong to Ἀριστονίκη. But as it does not conform to the rules of diminutive accentuation (acc. to *par.* 6.3.2.2 it should be *Ἀριστίον), even such instances are open to doubt: there was probably no diminutive value here. We have the impression that the name category -ιον (-ίον never occurs in women's names) was not different in value from the remaining derivational categories.

Personal names could be explicitly transposed to the adjective system *e.g.* Κάδμος—Καδμεῖος, Ἡσίοδος—Ἡσίοδειος, and implicitly to the substantive system: Ἀλέξανδρος "Alexander" to Ἀλέξανδρος "an Alexander, a person (king, warrior) like Alexander". Very incidental are transpositions to other morphological systems, an instance being Νικίας—μελλονικίᾱν "to delay victory like Nikias did" (Aristophanes *Aves* 640).

8.4. *Ethnics*

In addition to the classes of names discussed so far there are two groups of words which are usually also called "names" but which do not fully deserve to be considered as such. These are the ethnic substantives and adjectives.

a) *Ethnic substantives* are called not only those words which indicate actual members of an ethnic community like Μακεδών, but indications of members of other groups as well, like sectarians Νικολαίτης (Apc. II 6, 15), members of the same family Ἀχαιμενίδαι, Πτολεμαῖοι, *etc.* To this latter kind we also reckon to belong the Roman gentile names in Greek disguise like Ἀϋρήλιοι.

These words constitute systems which comprise categories of case and of number: Μακεδών, Μακεδόνας, *etc.*, Μακεδόνες, Μακεδόνων, *etc.* Moreover, they seem always to take part in the category of feminine gender: Μακεδών—Μακεδόνισσα. They could be transposed to the

¹ F. Schmid, *Die Deminutiva auf -ION im Vokativ bei Aristophanes*, diss. Zurich 1954, pp. 17, 57-67; cf. Schwyzler, *o.c.* II p. 61.

class of geographical names Μακεδονία, and to the adjective system Μακεδονικός, -ή, -όν, -ῶς.

When these ethnic substantives are themselves transpositions of geographical names a relation to a unique geographical thing is implied *e.g.* Ἀβδηρίτης "inhabitant of Ἀβδηρά",¹ but words like Μακεδών, Ἀραψ do not imply such a relation. It is precisely the name of a unique country which has been derived from them: Μακεδών—Μακεδονία, Ἀραψ—Ἀραβία *i.e.* properly "land of the Macedonians", "land of the Arabs". There do occur ethnic substantives that have never been transposed to the class of geographical names such as Τριβαλλοί, and most of the words that indicate the members of a special family like Ἀχαιμενίδαι. Sometimes ethnic substantives can be recognized as transpositions of ordinary substantives, for instance in Hdt. IV 20 the tribe of the Μελάγχλαινοι in Scythia, of μελάγχλαινοι "blackcloaks".

b) *Ethnic Adjectives* *e.g.* Μακεδονικός, -ή, -όν constitute systems of at least 26 categories, being combinations of the five oppositions of case, the two oppositions of number, the three of gender, and the opposition between adjective proper and the adjectival adverb. They take part only incidentally in the categories of comparison *e.g.* Ἀττικώτερος and Ἀττικώτατος (Cicero *Att.* I, 13, 5 and XV, 1b, 2). These adjectives are almost always transpositions of geographical or personal names *e.g.* Ἀττικός of the geographical name Ἀττική, which is in its turn a transposition of ἀκτική "shore-land" (according to Strabo IX, 1, 3), Νειλαῖος from Νεῖλος, Ἡσιόδειος from Ἡσιόδος; they could also be transpositions of ethnic substantives, like our instance Μακεδονικός of Μακεδών. When these words are used independently (non-attributively) they are practically identical with ethnic substantives *e.g.* οἱ Ἀττικοί.²

¹ E. Risch, *Zur Geschichte der griechischen Ethnika*, Museum Helveticum XIV 1957, p. 63 ss. discusses only such derivations from geographical names, not words like Πέρσης. According to him the productive types were those in -ιος (Κορίνθιος), -εύς (Μεγαρεύς), -της (Τεγεάτης), and in Asia Minor probably also those in -ηνός (Κυζικηνός).

² According to Saul Levin, *The Significance of Ethnic Classes in Greek and English*, T.A.P.A. 81, 1950, p. 130 ss. there was, at least in the Classical period, a difference in value between specific masculine ethnics, *e.g.* between Λακεδαιμόνιοι and Λακωνικοί. The former indicated the *citizens*, the latter other men connected with that city, but not necessarily citizens (pp. 145-146). There is a number of masc. exceptions in which this difference is not found, moreover it is always absent from feminine words. The author's main point is, however, that ethnic substantives were not formed to indicate mere

As both the ethnic substantives and adjectives do not indicate individual persons or things, but members of a unique group and relations with unique persons or things, they are from the semantical point of view in between proper names and appellatives. The declension is identical to that of some substantive or adjective type.

residence in a certain place or provenance therefrom, but rather membership in a class thought to have recognizable physical or moral traits: that explains why by the side of such uncharacterized communities as the Attic demes usually no ethnic substantives are found. In the U.S. "New Yorker" and "Texan" are current because the people indicated have certain characteristics (accent, manners, *etc.*), whereas such words as "Baltimoreans", "Dallasites" are "*fostered by local newspaper, but so far in vain because the classes lack distinctive traits*".

CHAPTER NINE

PRONOUNS

9.1. *Introduction.*

With the substantives, proper names, adjectives and numerals the pronouns have in common that they take part in the categories of case. They can, however, not be reckoned to belong to any of these systems, because they are different from:

substantives and proper names *a.o.* by the absence of the vocative category;¹

adjectives by the absence of the vocative and the categories of comparison;²

numerals *a.o.* by the absence of the ordinal category.³

Moreover, they differ from all Greek words existing by their special kind of lexical meaning, the *deictic meaning*, in which one can distinguish between:

a) The indication of the participants or non-participants of the speech event.

b) The indication of different relations to these (non-)participants, or to the speech-event and the language used in it.

This distinction runs roughly parallel with a significant difference in the structure of the minor systems constituted by the various pronouns:

(1) The pronouns indicating the participants as such, ἐγώ, σύ, and ἡμεῖς, ὑμεῖς, do not have any correlated adverbs (*cf.* sub 2), and do not take part in the categories of number and gender: the difference in value between ἐγώ and ἡμεῖς, σύ and ὑμεῖς is not identical to that between *e.g.* ἵππος and ἵπποι. On the other hand these words take part in the oppositions of emphasis (ἐμέ *vs.* με) and of reflexivity (ἐμέ *vs.* ἐμαυτόν).

(2) The pronouns indicating relations to the participants or to the speech event as such do take part in the categories of number and gender, and with the exception of the definite article, constitute minor systems or configurations, which comprise several

¹ Except for ἡμέτερε in Homer *e.g.* α 45 and 81.

² Except αὐτότερος, αὐτότατος in comedy: Epicharmus 5; Aristoph., *Pl.* 83; the adverb αὐτοτέρως is found in Galenus 18(2), 431.

³ Except ποστός and πόστος.

adverbial categories traditionally called the "correlative adverbs". The configuration of the pronoun $\delta\varsigma$ for instance comprises the correlative adverbs $\acute{\omega}\varsigma$, $\omicron\tilde{\upsilon}$, $\delta\tau\epsilon$, $\theta\theta\epsilon\nu$. These correlative adverbs further distinguish this subgroup 2 of the pronouns from the substantives, proper names and adjectives, but comparable categories are present in the numeral system, e.g. $\tau\acute{\epsilon}\varsigma\sigma\sigma\alpha\rho\epsilon\varsigma$: $\tau\epsilon\tau\ralpha\chi\tilde{\omega}\varsigma$, $\tau\epsilon\tau\ralpha\chi\omicron\tilde{\upsilon}$; $\pi\omicron\lambda\lambda\omicron\iota$: $\pi\omicron\lambda\lambda\alpha\chi\tilde{\omega}\varsigma$, $\pi\omicron\lambda\lambda\alpha\chi\omicron\tilde{\upsilon}$.

The pronoun $\alpha\upsilon\tau\acute{o}\varsigma$ which indicates the non-participant of the speech event belongs to a configuration, of which the structure is in between 1 and 2: it takes part in the oppositions of emphasis and reflexivity and also in the oppositions of number and gender; moreover, it has correlative adverbs.

A form peculiarity of the pronouns in general is that as far as their declension resembles that of adjective type $\delta\acute{\iota}\kappa\alpha\iota\omicron\varsigma/\kappa\acute{o}\kappa\kappa\iota\nu\omicron\varsigma$ they have a neuter nom./acc. sg. which ends in -o instead of -on: δ , $\tau\acute{o}$, $\alpha\upsilon\tau\acute{o}$, $\tau\omicron\tilde{\upsilon}\tau\omicron$, $\acute{\epsilon}\kappa\epsilon\tilde{\iota}\nu\omicron$, $\acute{\alpha}\lambda\lambda\omicron$ (also $\tau\acute{\iota}$ and $\tau\iota$ instead of $*\tau\acute{\iota}\nu$? cf. $\tau\acute{\iota}\nu\omicron\varsigma$ etc.). The adjectives correlated with the different pronouns have, however, a neuter nom./acc. sg. ending in -on: $\acute{\epsilon}\mu\acute{o}\nu$, $\acute{\eta}\mu\acute{\epsilon}\tau\epsilon\rho\omicron\nu$, etc., $\pi\acute{o}\varsigma\omicron\nu$, $\pi\omicron\tilde{\iota}\omicron\nu$, $\tau\omicron\sigma\omicron\upsilon\tau\omicron\nu$, etc. The only exception is $\xi\tau\epsilon\rho\omicron\nu$, which originally did not belong to the pronominal system but to that of the numerals, and had the meaning "one out of two". In the Hellenistic period it became synonymous with $\acute{\alpha}\lambda\lambda\omicron$ and should therefore be reckoned among the pronouns.

The characteristics summed up thus far suffice in our opinion for distinguishing the pronouns of Koine-Greek as a separate system of configurations which comprises the pronouns in the proper sense, the correlative adverbs and the so-called "correlative adjectives".¹ This latter term will be used to refer to such words as $\pi\acute{o}\varsigma\omicron\varsigma$, $\pi\omicron\tilde{\iota}\omicron\varsigma$, etc. although they do not take part in the categories of comparison, and are therefore no adjectives in the full sense.

We are aware of the fact that the inclusion of some words in the pronominal system does not always take into account their entire word meaning: $\acute{\epsilon}\alpha\nu\tau\omicron\upsilon\varsigma$ for instance has a clearly deictic aspect of meaning "our-, your-, them-selves", but besides this an aspect "one another" which is hardly deictic (cf. $\acute{\alpha}\lambda\lambda\acute{\eta}\lambda\omicron\nu\varsigma$).

¹ Compare the term "adjective system" used above to refer to the adjectives proper and their adverbs in - $\acute{\omega}\varsigma$ together. In the same way the terms "pronoun" and "correlative" or "pronominal adverb" are maintained, because the syntactical difference between them runs roughly parallel with that between adjective and adj. adverb.

A detailed discussion of the pronouns has to face two tasks: the description of forms and that of the lexical meanings and categorial values. Where oppositions of number, gender and case are present they are on the whole not different in value or valence from those found in the substantive and adjective systems.

The fact that the members of all the categories constituting the pronominal system can be mentioned, indicates that the system is *closed*. That some of the adverbial categories have expanded by transpositions from the substantives and adjectives (*e.g.* οὐρανόθεν, παιδιόθεν, μακρόθεν, ἐγγύθεν) does not alter this fact, because no series of words has been added which increased all the categories at the time. The only conceivable extension might arise from the formation of words filling up the blanks in the system, for instance the formation of correlative adverbs by the side of the definite article, or from the introduction of a special pronoun by the side of ἡμεῖς in order to express the non-inclusion of the addressee (*cf.* French '*nous*' *vs.* '*nous autres*'). All such incidental additions, however, would still not change the closed character of the pronominal system. In this connection we should also remark that it is only by way of comparison that we have used sometimes the term "category" to refer to configurations of such restricted numbers of words as found in this system.

At the end of this introduction we shall give a survey which for brevity's sake will list only one of the total number of correlative adverbs of each pronoun. The last three columns as well as the fragment of the numeral system below are intended to bring out where the connections with that system lie. Bracketed words are not attested in our period (1st century A.D.). The order of discussion will be as follows:

- (1) the configuration of ἐγώ, σὺ, ἡμεῖς, ὑμεῖς and their reflexive counterparts and correlative adjectives;
- (2) the configuration of αὐτός and its reflexive counterpart and correlative adverbs;
- (3) the configurations of the remaining pronouns and their correlative adverbs and adjectives, including the definite article.

Survey

I <i>opposition</i>	II <i>pronouns</i>	III <i>adv. corr. with II</i>	IV <i>adj. corr. with II</i>	V <i>adv. corr. with IV</i>	VI <i>multipl. to IV</i>	VII <i>ordinal to IV</i>
partici- pant	ἐγώ, σύ ἡμεῖς, ὑμεῖς ἐμαυτὸν σεαυτὸν		ἐμός etc. ἡμεδαπός			
non-par- ticipant	αὐτον αὐτός ἐαυτὸν	αὐτοῦ				
determi- nating	ὁ αὐτός	{ ὡσαύτως ὁμοῦ	(ταυτοῖος) δμοιος			
distin- guishing	ἄλλος ἕτερος	ἄλλαχού ἐτέρωθεν	{ ἄλλοιός ἄλλοδαπός ἐτεροῖος	ἀλλοίως		
relative	ὅς ὅστις	οὗ ὅπου	{ οἷος, ὅσος, ἡλίκιος ὁποῖος etc.	(οἷως) ὁσαχού	ὁσάκις ὁποσάκις	{ (ὁπόστος) (ὁποσταῖος)
demonstr.	οὗτος ἐκεῖνος	ἐνθα ἐκεῖ	{ τοιοῦτος τοσοῦτος τηλικούτος	(τοιούτως) τοσαυταχῶς	τοσαυτάκις	
indefinite	τις	που	{ ποιός ποσός πηλίκιος	(ποσῶς)	ποσάκις	ποστός
interrog.	τίς	ποῦ	{ ποῖος πόσος πηλίκιος ποδαπός	(ποίως) ποσαχού ποδαπῶς	ποσάκις	{ πόστος ποσταῖος
def. art.	ὁ	—	—			
def. num.	τέσσαρες			τετραχού	τετράκις	τέταρτος τεταρταῖος
indef. num.	πολλοί			πολλαχού	πολλάκις	πολλοστός (πολλοσταῖος)

9.2. *Personal Pronouns*
9.2.1. *Survey*

Oppositions	Participants			non-excl.	Non-Participants					
	exclusive	non-excl.	excl.		m.		f.		n.	
					sg.	pl.	sg.	pl.	sg.	pl.
non-emph.	— μου μοι με	— ἡμῶν ἡμῖν ἡμᾶς	— σου σοι σε	— ὑμῶν ὑμῖν ὑμᾶς	— αὐτοῦ αὐτῷ αὐτόν	— αὐτῶν αὐτοῖς αὐτούς	— αὐτῆς αὐτῇ αὐτήν	— αὐτῶν αὐτοῖς αὐτά	— αὐτοῦ αὐτῷ αὐτό	— αὐτῶν αὐτοῖς αὐτά
emphatic	ἐγώ ἐμοῦ ἐμοί ἐμέ	ἡμεῖς ἡμῶν ἡμῖν ἡμᾶς	σύ σοῦ σοί σέ	ὑμεῖς ὑμῶν ὑμῖν ὑμᾶς	αὐτός αὐτοῦ αὐτῷ αὐτόν	αὐτοί αὐτῶν αὐτοῖς αὐτούς	αὐτή αὐτῆς αὐτῇ αὐτήν	αὐτά αὐτῶν αὐτοῖς αὐτάς	αὐτό αὐτοῦ αὐτῷ αὐτό	αὐτά αὐτῶν αὐτοῖς αὐτά
reflexive	— ἐμαυτοῦ, -ῆς ἐμαυτῷ, -ῇ ἐμαυτόν, -ήν	— ἐαυτῶν, -ῶν ἐαυτοῖς, -αῖς ἐαυτοῦς, -άς	— σεαυτοῦ, -ῆς σεαυτῷ, -ῇ σεαυτόν, -ήν	— ἐαυτῶν, -ῶν ἐαυτοῖς, -αῖς ἐαυτοῦς, -άς	— ἐαυτοῦ ἐαυτῷ ἐαυτόν	— ἐαυτῶν ἐαυτοῖς ἐαυτούς	— ἐαυτῆς ἐαυτῇ ἐαυτήν	— ἐαυτῶν ἐαυτοῖς ἐαυτάς	— ἐαυτοῦ ἐαυτῷ ἐαυτό	— ἐαυτῶν ἐαυτοῖς ἐαυτά
possessive	ἐμός	ἡμέτερος	σός	ὑμέτερος						
origin		ἡμεδαπός		ὑμεδαπός						

The pronouns which indicate the participants of the speech event constitute a five dimensional system or rather configuration. These dimensions are:

- (1) the opposition of participation: addresser *vs.* addressee
- (2) the opposition exclusive *vs.* non-exclusive
- (3) the opposition non-emphatic *vs.* emphatic
- (4) the opposition personal *vs.* reflexive
- (5) the oppositions of case.

Moreover, there are some correlated adjectives to which we reckon the so-called possessive pronouns.

The configuration of the non-participants is also five dimensional, but the dimensions are partly different from those of the participants' system: oppositions 3, 4 and 5 are shared with the latter, but instead of the oppositions of participation and exclusivity we find here:

- (1) the opposition of gender: masculine *vs.* feminine *vs.* neuter
- (2) the opposition of number: singular *vs.* plural.

9.2.2. Values of the Participants.

9.2.2.1. *Addresser vs. Addressee.* The difference in value between ἐγώ *etc.* and σὺ *etc.* lies in the indication of rôles: the former refers to the speaker or writer of that sentence in which it occurs, while the latter refers to the person *to* whom the sentence in which it occurs is spoken or written. Both words may also be the only words of the sentence. As they refer to rôles *in the speech event* it stands to reason that the actual identity of the persons indicated by them shifts every now and then in conversation: when John talks to Mary and uses the word ἐγώ he refers to *himself*, but when Mary answers and uses the same word ἐγώ, she does not refer to John, but to *herself*. *Mutatis mutandis* the same holds good of σὺ. For this reason these words have been termed "*shifters*" by Jespersen and later on by Jakobson.¹ The opposition between ἐγώ and σὺ is proportionate to that between ἡμεῖς "*I and others*" and ὑμεῖς "*you and others*", and also to that between ἐμαυτὸν *etc.* and σεαυτὸν *etc.*

9.2.2.2. *Exclusive vs. Non-Exclusive.* Although the opposition

¹ Cf. O. Jespersen, *Language, Its Nature, Development and Origin*, Copenhagen 1923, pp. 123-124; R. Jakobson, *Shifters, Verbal Categories and the Russian Verb*, Russian Language Project, Harvard University, 1957.—'Εγώ has of course a different, non-deictic, meaning when substantivized: ὁ ἐγώ "*the ego*" (Damascius, *De princ.* 444).

ἐγώ *etc.* vs. ἡμεῖς *etc.* and of σύ *etc.* vs. ὑμεῖς *etc.* is traditionally referred to as “singular/plural”¹, it is different from that between the number-categories of the substantive. As we have seen, ἐγώ and σύ refer resp. to the rôles of addresser and addressee which persons, animals, and inanimate things conceived of as speaking persons, may play in the speech situation. However, ἡμεῖς does not refer to a plurality of addressers nor does ὑμεῖς necessarily refer to a plurality of persons addressed. They refer resp. to ἐγώ and σύ plus another person or other persons, who do not (resp. need not) perform the same rôle in the speech situation, but that of:

- a) addressee or addressees
- b) non-addresser(s) and non-addressee(s)
- c) *a* and *b* combined.

It depends on the context which of these possibilities is actually intended:

- a) Acts I 15-16 ἀναστὰς Πέτρος ἐν μέσῳ τῶν ἀδελφῶν εἶπεν . . . 16. ὅτι (Ἰούδας) κατηριθμένος ἦν ἐν ἡμῖν *i.e.* me and you and you, *etc.*
- b) Acts XXVIII 2 ἅψαντες γὰρ πυρὰν προσελάβοντο πάντας ἡμᾶς *i.e.* me (the author) plus others among whom was St. Paul.
- c) Galatians I 3 χάρις ὑμῖν καὶ εἰρήνη ἀπὸ θεοῦ πατρὸς ἡμῶν *i.e.* of me (St. Paul) and of you and you *etc.* (the Galatians), and of them (the brothers who have been mentioned in the previous verse).

Ἡμεῖς refers only seemingly to a plurality of addressers when it occurs in songs and prayers in which people speak together *e.g.* Aristophanes *Equites* 269-270 εἶδες οἱ' ὑπέρχεται (270) ὥσπερ εἰ γέροντας ἡμᾶς, and in Apc. VI 10 τὸ αἶμα ἡμῶν. However, it must not be forgotten that each person of the chorus refers to a different “me” and to different “others”. It is precisely the special character of the shifters which enables people to speak or sing these words simultaneously without actually referring to the same person(s): several people can also together sing a song in which the pronoun “me” occurs.

These remarks do not complete the description. It is well known that ἡμεῖς and ὑμεῖς can be used instead of ἐγώ and σύ. This usage which is traditionally called “pluralis reverentiae” or “modestiae”,

¹ Defended explicitly by W. Dressler, *Vom altgriechischen zum neugriechischen System der Personalpronomina*, Indogerm. Forsch. 71, 1966, pp. 48-49.

avoids as it were to refer too openly to the addresser or addressee in question *e.g.* I John I 4 ταῦτα γράφομεν ἡμεῖς, but in the next chapter of this letter the author says ταῦτα γράφω (II 1).¹ The reverse is impossible: ἐγώ and σύ cannot be used for ἡμεῖς and ὑμεῖς, which proves that the latter are unmarked (a second difference with the substantive plural!). In choruses ἐγώ seems sometimes used for ἡμεῖς, but then the poet rather refers to himself than to the persons who make up the chorus. The oppositions can now be schematized as follows:

<i>marked</i>	<i>unmarked</i>
exclusive (of others)	non-exclusive
ἐγώ "addresser only"	ἡμεῖς "addresser plus other person(s) or "addresser only, reverential"
σύ "addressee only"	ὑμεῖς "addressee plus other person(s) or "addressee only, reverential"

9.2.2.3. *Emphatic vs. Unemphatic.* The form difference between ἐμοῦ *etc.* and μου *etc.* is correlated with a difference in emphasis. The accentual divergence of σοῦ and σου, ἡμῶν and ἡμων, ὑμῶν and ὕμων, does of course not appear from our oldest *mss.*² The ancient grammarians, for instance Apollonius Dyscolus, tell us, however, that these differences in accent existed, but they are not maintained in the modern editions.³

There was a tendency—already in Classical Attic—to use with prepositions only the emphatic pronouns. In the use of language in the Apc. there is only one exception: I 10 A ὀπισθέν μου (*mss.*: ὀπισω), but the remaining prepositions occur with the emphatic pronouns: μετ' ἐμοῦ (II ×), παρ' ἐμοῦ (I ×), ἐπ' ἐμέ (I ×). That ἐμοῦ *etc.* are not necessarily emphatic in this position appears from *e.g.* Apc. I 12 *vs.* III 18 συμβουλεύω σοι [ἀγ]οράσαι παρ' ἐμοῦ

¹ H. Zilliacus, *Selbstgefühl und Servilität. Studien zum unregelmässigen Numerusgebrauch im Griechischen*, Soc. Scient. Fennica, Comment. Litt. Hum. XVIII-3, Helsinki 1953.

² In later times (II A.D.) the proportionality of ἐμοῦ : μου = σοῦ : σου *etc.* was formally reinforced by introducing ἐσοῦ, ἐσέ (not NT).

³ On ἡμων *etc.* see Liddell-Scott *s.v.* ἐγώ; Schwyzer, *o.c.*, I pp. 602-603; Apollonius Dysc., *De pron.* p. 62 (12) (*ed.* Schneider-Uhlig I-1); Herodianus I 558 (*ed.* Lentz) *cf.* II 155 (9-10), 517 (20); K. Mitsakis, *The Language of Romanos the Melodist*, Munich 1967, p. 9; Babrius, *Fabulae ed.* Crusius, Leipsic 1897, pp. XLIII-XLIV.

χρυσίον *etc.* It can therefore be said that the opposition emphatic — unemphatic was neutralized after prepositions. This might imply that ἐμοῦ *etc.* were unmarked as opposed to μου *etc.* : the former would be then emphatic or not, the latter unemphatic.

9.2.3. *Peculiarities in the Apc.* It may seem that there are some reverential plurals in the Apc. in the Letters to the Seven Churches: II 10 ὑμῶν (*cf.* II 9 σοῦ), II 13 ὑμῖν (*cf.* II 14 σοῦ), and II 23-24 ὑμῖν . . . ὑμῶν . . . ὑμῖν (*cf.* II 19 σοῦ). In our opinion these words are no referential plurals but indicate actual shifts of addressee: σοῦ refers to the angel of the church as the addressee, ὑμῶν and ὑμῖν to the members of the church as the addressees. This shift is made expressis verbis in the Letter to Thyatira: in II 19-20 the angel is addressed, but in *vv.* 23-24 the church members: ὑμῖν δὲ λέγω τοῖς λοιποῖς τοῖς ἐν Θυατίροις.

In Non-Biblical Greek only the emphatic pronouns had a nominative case. In Biblical Greek, however, these nominatives: ἐγώ, σύ, ἡμεῖς, ὑμεῖς, are not necessarily emphatic *e.g.* Acts IX 10 καὶ εἶπεν . . . ὁ κύριος· Ἀνανία. ὁ δὲ εἶπεν· ἰδοὺ ἐγώ, κύριε. According to Blass-Debrunner this usage is due to the influence of Hebrew and Aramaic in which languages the use of subject pronouns was frequent and not especially emphatic.¹ In the Apc. we find such an unemphatic nominative perhaps in III 19 ἐγὼ ὅσους ἐὰν φιλήω ἐλέγχω. (*cf. par.* 9.5.5.).

9.3. Reflexive Pronouns

9.3.1. Declension.

gen.	ἐμαυτοῦ, -ῆς	σεαυτοῦ, -ῆς	ἐαυτοῦ, -ῆς, -οῦ
dat.	ἐμαυτῷ, -ῇ	σεαυτῷ, -ῇ	ἐαυτῷ, -ῇ, -ῶ
acc.	ἐμαυτόν, -ήν	σεαυτόν, -ήν	ἐαυτόν, -ήν, -όν
gen.	(ἡμῶν αὐτῶν)	(ὑμῶν αὐτῶν)	ἐαυτῶν
dat.	(ἡμῖν αὐτοῖς, -αῖς)	(ὑμῖν αὐτοῖς, -αῖς)	ἐαυτοῖς, -αῖς, -οῖς
acc.	(ἡμᾶς αὐτούς, -άς)	(ὑμᾶς αὐτούς, -άς)	ἐαυτούς, -άς, -ά

The declension of these pronouns is similar to that of αὐτός, except for the fact that there are no other neuter forms than ἐαυτό and ἐαυτά, and no nominatives. Ἐμαυτός is a comic formation found only in Plato *Comicus frag.* 78 (VI/V B.C.). The word groups

¹ Blass-Debrunner, *o.c.*, *par.* 277, 2; *cf.* Gesenius-Kautzsch, *o.c.*, *par.* 135b. — Much more emphatic was ἐγώ (Apc. II 6, 28, III 10, 21) a blend of καὶ and ἐγώ, which preserved α[a] by the time when καὶ [kaj] had become [ke].

ἡμῶν αὐτῶν *etc.* and ὑμῶν αὐτῶν *etc.* are obsolete in the *N.T.*; the only instance, at 1 Cor. V 13, happens to be a quotation from the LXX (Deut. XVII 7); at Acts XX 30 ὑμῶν αὐτῶν is not reflexive. The contracted forms σαυτόν and αὐτόν (in Koine Greek homophonous with αὐτόν) are falling into disuse in the first century A.D., and are absent from the Apc. except for VIII 6 (A, **κ***). In XIII 16 αυτοῖς is not reflexive: καὶ ποιεῖ πάντας . . . , ἵνα δώσιν αὐτοῖς χά[ραγμα] ἐπὶ τῆς χειρὸς αὐτῶν means: "and he causes all . . . , that one should give them", the plural δώσιν being here indefinite in value.

9.3.2. *Reflexive Value.* The three reflexive pronouns have the common value of implying that the persons referred to are identical to those referred to by another word in the same sentence or close context, for instance by the personal category of a finite verb or by another pronoun. The person referred to by ἐμαυτόν *etc.* is identical to the addresser, the one referred to by σεαυτόν *etc.* to the addressee. The opposition between these pronouns runs therefore wholly parallel to that between ἐμέ *etc.* and σέ *etc.* One would expect the reflexive pronoun of the third person to be a compound of αὐτόν and αὐτόν, the latter comparable to the second element in ἐμαυτόν and σεαυτόν, but the resulting αὐταυτόν is restricted to the Doric dialects.

The reflexive pronouns of the 3rd person ἑαυτόν, ἑαυτήν, ἑαυτό are neither formally nor semantically parallel to ἐμαυτόν and σεαυτόν, as the element ἐ- is no longer extant in Koine Greek as a separate word. Moreover, ἑαυτόν *etc.* do not refer to *non*-participants only—as εἰ did—but to all three persons alike, both to participants and to non-participants according to context:

1st person: 1 Cor. XI 31 εἰ δὲ ἑαυτοὺς (ourselves) διεκρίνομεν *etc.*

2nd person: Matt. XXIII 31 ὥστε μαρτυρεῖτε ἑαυτοῖς (for yourselves) *etc.*

3rd person: Matt. XVIII 4 ὅστις οὖν ταπεινώσει ἑαυτόν, John XIX 24 διεμερίσαντο . . . ἑαυτοῖς. In the *N.T.* the only certain "singular" instance of ἑαυτόν indicating a participant is in John XVIII 34 ἀφ' ἑαυτοῦ σὺ τοῦτο λέγεις; (so E, F, G, H, W, Θ, but σεαυτου B, C, N, **κ**, P66).

When ἑαυτοὺς *etc.* refers to non-participants the plural category is identical to that of a substantive, but when its meaning is "ourselves" or "yourselves", the value of number is more like that of ἡμεῖς or ὑμεῖς.

Besides its reflexive aspects of meaning ἑαυτοὺς has also a reciprocal aspect "one another, each other", comparable to the meaning

of ἀλλήλους, ἀλλήλας, ἀλληλα *e.g.* in 1 Thess. V 13 εἰρηνεύετε ἐν ἑαυτοῖς, and with stylistic variation in Col. III 13 ἀνεχόμενοι ἀλλήλων καὶ χαρίζόμενοι ἑαυτοῖς. Just as the reflexive ἑαυτούς the *reciprocal* ἑαυτοὺς may refer to persons as being identical to either participants or non-participants. It depends entirely on the context, especially on the meaning of the verb, whether ἑαυτοὺς is reflexive or reciprocal, and which of the three sub-aspects of each is meant, and sometimes not even the context gives us a clue, *e.g.* Luke XX 5 οἱ δὲ συνελογίζοντο πρὸς ἑαυτοὺς: reflexive or reciprocal? It is even conceivable that here both are meant at the same time.

9.3.3. *Oppositions to the Personal Pronouns.* Incidentally the personal pronouns of the 1st and 2nd persons are used as reflexives. Instances from the N.T. are:

Matt. VI 2 μὴ σαλπίσσης ἔμπροσθέν σου

Matt. VI 19 μὴ θησαυρίζετε ὑμῖν θησαυροὺς, *etc.*

This usage shows that the reflexive pronouns are marked as opposed to the personal. The same holds probably good of αὐτόν and αὐτον *e.g.* Mark I 10 καὶ εὐθὺς ἀναβαίνων ἐκ τοῦ ὕδατος εἶδεν . . . τὸ πνεῦμα ὡς περιστερὰν καταβαῖνον εἰς αὐτόν.

Although no accents were written in antiquity such instances can hardly be interpreted as an Atticistic reflexive αὐτόν, because this would have been indistinguishable from αὐτόν, as both were phonetically [awtón]. The pronoun ἑαυτόν *etc.* was therefore also marked as opposed to αὐτόν, αὐτον.¹ As ἑαυτοὺς could be reflexive or reciprocal, but ἀλλήλους was reciprocal only, the latter was the marked member of the pair.

These oppositions can now be displayed as follows:

unmarked personal or reflexive	marked reflexive		
	marked participants	unmarked participants or non-participants	
ἐμέ, σέ, αὐτόν	ἑμαυτόν, σεαυτόν	ἑαυτόν	
ἡμᾶς, ὑμᾶς, αὐτοὺς	—	ἑαυτοὺς (reflexive or reciprocal)	marked reciprocal ἀλλήλους

¹ Cf. Schwyzer, *o.c.*, II, pp. 196 and 206.

9.4. *Possessive Adjectives*9.4.1. *Declension:*

nom.	ἐμός, -ή, -όν	σός, σή, σόν	ἡμέτερος, -α, -ον	ὕμέτερος, -α, -ον
gen.	ἐμοῦ, -ῆς, -οῦ	σοῦ, σῆς, σοῦ	ἡμετέρου, -ας, -ου	ὕμετέρου, -ας, -ου
dat.	ἐμῷ, -ῇ, -ῶ	σῷ, σῇ, σῶ	ἡμετέρῳ, -α, -ῳ	ὕμετέρῳ, -α, -ῳ
acc.	ἐμόν, -ήν, -όν	σόν, σήν, σόν	ἡμέτερον, -αν, -ον	ὕμέτερον, -αν, -ον
	etc.	etc.	etc.	etc.
cf.	ἐγώ, ἐμοῦ	σύ, σοῦ	ἡμεῖς	ὕμεῖς

9.4.2. *Values and Meaning.* The case-number and gender values are wholly similar to those of the adjectives. In fact these words come very close to ordinary adjectives: the neuter nom./acc. sg. end in -ν, not in -ο as αὐτό, but vocatives and categories of comparison are absent.

The meaning is not only *possessive* in the strict sense as the name might suggest, but comprises all kinds of relations to the participants, such as “(un-)“favorable to . . .”, “directed against . . .”, *etc.* As a whole it is perhaps best defined by “expressing an unspecified relation to the participant(s) of the speech event”. The emphatic ἴδιος “own” is used as the possessive adjective by the side of the reflexive pronoun ἑαυτόν, *etc.*, with reference to any participant or non-participant, for instance to the 1st person pl. in 1 Cor. IV 12 κοπιῶμεν ἐργαζόμενοι ταῖς ἰδίαις χερσίν.

9.4.3. *Peculiarities in the Apc.* These possessive adjectives are not used in the Apocalypse, except for the only occurrence in II 20 τοὺς ἐμοὺς δούλους. Everywhere else in the book the genitives of the personal pronouns are used instead. This low frequency of ἐμός *etc.*,—which is in contrast with the 51 times that these words occur in the Gospel and Letters of St. John—may be due to the fact that Hebrew and Aramaic offer no *exact* parallel to them, because in these languages the substantive system comprises possessive categories. The closest equivalent would probably be the word לִי (plus possessive suffixes) which may be paraphrased as “possession of . . .” but is in reality the relative particle יְ followed by the preposition ל “to” and has therefore rather the meaning: “which (is) of . . .”, “which (belongs) to . . .” The use of the genitives μου, σου, *etc.*, on the other hand, were much more in line with the Heb.-Aram. possessive categories, as they were almost exclusively postpositive.

9.5. *Values and Meaning of the Non-Participants*

9.5.1. *Introductory Remarks.* The configuration of the non-participants has two oppositions in common with that of the participants, namely the oppositions emphatic *vs.* non-emphatic, and the opposition personal *vs.* reflexive. However, the opposition between *e.g.* αὐτον and αὐτους, αὐτόν and αὐτούς, *etc.*, is not comparable to that between ἐμέ and ἡμᾶς, σέ and ὑμᾶς. Moreover, it comprises oppositions of gender as well as correlative adverbs, by which the structure resembles that of the configurations of οὗτος, ὅς, *etc.*, but unlike the latter that of αὐτον *etc.* does not comprise correlative adjectives. It occupies therefore a position which is in between the personal and the remaining pronouns, sharing oppositions with both kinds.

9.5.2. *Opposition αὐτός vs. ἐγώ, σύ.* The unemphatic αὐτον indicates a person or thing who is in the speech event neither the addresser nor the addressee, but with regard to the emphatic counterpart αὐτόν *etc.*, matters are somewhat different: when used independently, that is not as an apposition or with reference to the subject of a finite verb, it probably refers to non-participants only, just as αὐτον. With both the assumption is connected that the actual identity of the person *etc.* referred to may be concluded by the addressee either from the context or from the situation around the speech event. Some instances of this so-called anaphorical usage are:

1 John IV 12 ἐν αὐτῷ (*i.e.* God) μένομεν καὶ αὐτός ἐν ἡμῖν

Apc. III 20 δ(ε)ἰπνήσω μετ' αὐτοῦ (*i.e.* He who opens the door) καὶ αὐτός μετ' ἐμοῦ.

However, when αὐτός is used dependently, it does not exclusively refer to *non*-participants, but may also be used in combination with verbs or pronouns that refer themselves to *participants*, for instance in:

Luke XI 4 καὶ γὰρ αὐτοὶ ἀφίομεν

Luke XI 52 αὐτοὶ οὐκ εἰσῆλθατε

Acts XX 30 ἐξ ὑμῶν αὐτῶν ἀναστήσονται ἄνδρες (B om. αυτων).

The same holds good of αὐτός *etc.* when it implies in answer sentences a 1st or 2nd person, mentioned also in the preceding sentence, for instance in Athenaeus I 2 "Αὐτός, ὃ 'Αθήναιε, μετελληφώς τῆς καλῆς ἐκείνης συνουσίας . . . ἢ παρ' ἄλλου μαθὼν τοῖς ἐταίροις διεξήεις;" "Αὐτός, ὃ Τιμώκρατες, μετασχών." All these combinations

in which αὐτός *etc.* does not refer to non-participants are understandable only once αὐτός is considered the unmarked counterpart of ἐγώ, σύ.

The unemphatic αὐτον, *etc.* could not be used in combination with other pronouns or with reference to a 1st or 2nd person expressed by a finite verb, which leads to the conclusion that it referred only to non-participants, and is to be regarded as the marked member of the opposition αὐτον—αὐτόν, because the latter could refer according to context to participants or non-participants. The different oppositions of participation may have been as follows:

<i>marked</i>	<i>unmarked</i>	<i>marked</i>
ἐμέ, με, σέ, σε ἡμᾶς, ἡμας, ὑμᾶς, ὑμας participants only	αὐτόν non-participants or neutral	αὐτον non-participants only

9.5.3. *Opposition of Emphasis.*

The unemphatic αὐτον differs only in accent from the emphatic αὐτόν, and is the only enclitic 3rd person pronoun mentioned by the grammarian Apollonius Dyscolus, who also discusses why the expected αὐτου, αὐτω, αὐτης, *etc.*, did not occur,¹ namely because both syllables of these words contained a long vowel or diphthong. As this does not exclude αὐτο and αὐτα we believe that these at least may also have existed by the time of Apollonius (IIInd cent. A.D.). Furthermore, we do not think it unlikely that when in Koine-Greek the phonematic distinction between long and short vowels had wholly disappeared, all the words constituting the paradigm of αὐτός were matched by unaccented counterparts with unemphatic value, except for the nominatives. In all likelihood the Modern Greek το(ν), τη(ν), το which are unemphatic as opposed to αὐτό(ν), αὐτή(ν), αὐτό have arisen from such Hellenistic forms as postulated.²

At first sight the emphatic αὐτός seems to combine rather divergent aspects of meaning, namely:

¹ Ed. Schneider-Uhlig, I-I, pp. 61 (16, 24) and 62 (8-13); cf. A. Thierfelder, *Beiträge zur Kritik und Erklärung des Apollonius Dyscolus*, Abh. Sächs. Ak. Wiss. Phil.-hist. Kl. 43, 2. 1938, p. 22.

² Cf. Schwyzer, *o.c.*, II, p. 191.

- (1) "he, she, it, *etc.*": emphatic reference to non-participants *e.g.* οὐκ εἶδον αὐτόν.
- (2) "self": emphasis only *e.g.* εἶδον αὐτὸν τὸν ἄνδρα, αὐτοὶ ἀφίομεν, αὐτοὶ οὐκ εἰσῆλθατε, ὑμῶν αὐτῶν (*cf. par. 9.5.2.*).
- (3) "(the) same": explicit statement of identity with previously mentioned persons *etc.* *e.g.* εἶδον τὸν αὐτὸν ἄνδρα, εἶδον τὸν ἄνδρα τὸν αὐτόν.

In our opinion these aspects, which have in common that they are emphatic, can be considered to constitute only one word-meaning, if one assumes with us that αὐτός is unmarked as against ἐγώ and σύ, which implies that it indicates persons *etc.* who may be participants or not (see *par. 9.5.2.*). Because of its neutral character αὐτός could therefore be combined with verbs or pronouns indicating participants, and seemingly retained in such combinations only the emphatic aspect of meaning. Moreover, our instances may demonstrate that each of the aspects of αὐτός which we distinguished above occurs under specific syntactical circumstances, which do not overlap and are therefore in complementary distribution. The circumstances to which the aspects 1, 2 and 3 are confined are respectively:

- (1) Combination of the oblique cases αὐτοῦ *etc.* with a verb.
- (2) Combination of the nominatives αὐτός *etc.* with a *finite* verb, or of all the cases with a substantive of the same case category, provided it is not placed between the article and the substantive or with repetition of the article after the substantive (*cf. sub 3.*).
- (3) Combination with an articular substantive and placed between article and substantive, or with repetition of the article after the substantive.

As aspect 1 does not need any further discussion we will devote special paragraphs only to aspects 2 and 3.

9.5.4. αὐτός "self". This emphatic aspect of meaning can be described as: "contrasting with other persons *etc.*, who may be indicated by the context or not". According to context one can make some distinctions within this aspect for instance in a phrase like αὐτὸς ὁ ἵππος:

inclusion: (if preceded by καὶ): "(and) also the horse"

exclusion: "the horse himself, the horse only and no other animal"

concession: "even the horse"

The circumstances under which αὐτός 2 occurs have been set out in the preceding paragraph. The difference between αὐτὸν τὸν ἵππον “the horse himself” and αὐτόν, τὸν ἵππον “. . . him, the horse” (appositional) was undoubtedly correlated with a difference in intonation as reflected by the difference in the accent marks on αὐτὸν and αὐτόν.

According to Schwyzer this contrasting αὐτός 2 is used with substantives only that are articular,¹ but this not quite correct: cf. Aristides *In Sar.* 357, 20-21 (Keil) ἡ θεῶν τε αὐτῶν ἔννοιαν ἔδωκεν ἀνθρώποις, and also with proper names: Mark XII 36 αὐτός Δαυὶδ εἶπεν.

It may be, however, that on the whole αὐτός was used with articular or non-articular substantives that indicated persons *etc.*, who can be considered as known to the addressee. This would be in line with the anaphorical character of αὐτός 1 (see *par.* 9.5.2.).

9.5.5. *Peculiarities in the Apocalypse.* The only instance of αὐτός combined with a substantive is Apc. XXI 3 (א) καὶ αὐτός ὁ θεὸς μετ’ αὐτῶν ἔσται. Combinations of the nominatives with 1st or 2nd person verbs are not found at all. This construction may have been strange to Jews because there was no exact counterpart in Hebrew-Aramaic: הוּא could not be used with 1st or 2nd persons verb without אֲנִי or הָאֵלֶּה being added.

If it is one of the characteristics of Biblical Greek that the nominatives αὐτός *etc.* may be used in it without implying any emphasis or contrast *e.g.* Luke V 1 ἐγένετο δὲ ἐν τῷ τὸν ὄχλον ἐπικεῖσθαι αὐτῷ καὶ ἀκοῦειν τὸν λόγον τοῦ θεοῦ καὶ αὐτὸς ἦν ἐστὼς παρὰ τὴν λίμνην; this peculiarity may be due to the Hebrew and Aramaic use of personal pronouns without emphasis. In our quotation καὶ αὐτός ἦν ἐστὼς might reflect a Hebrew קָם (הָקָם) הוּא or an Aramaic קָמָא (הָקָמָא) הוּא,² but it has been shown that *e.g.* the 22 alleged instances in Luke can be reduced to 7, and that the pronoun may still have some emphatic value when referring as a kind of technical term to the coming Messiah or to Christ, with which one may compare the Pythagorean phrase αὐτός ἔφα.³ In the Apc. such an unemphatic use of the nominatives does not occur; in III 20, VI 11, XII 11,

¹ *o.c.*, II, p. 211.

² Segal, *o.c.*, *par.* 323; H. Odeberg, *The Aramaic Portions of Bereshit Rabba* vol. II *Short Grammar of Galilaean Aramaic*, Lund 1939, p. 116.

³ W. Michaelis, *Das unbetonte καὶ αὐτός bei Lukas*, *Studia Theol.* IV 1950, p. 86 ss.

XIV 17, XVII 11, XVIII 6, XIX 12, 15, 15 and XXI 3 and 7 (A om.) they are either emphatic or contrasting. A doubtful case is XIV 10 εἴ τις προσκυνεῖ τὸ θυσιαστήριον (*mss.*: θηρίον or θηρίῳ) καὶ αὐτὸς πίεται ἐκ τοῦ οἴνου *etc.*, where καὶ αὐτὸς πίεται probably means "he, too, will drink" just as the heathens mentioned in *v.* 9, only a different drink.

9.5.6. ὁ αὐτός "*the same*". When αὐτός is used as an attributive adjective or as a substantivated word it has an aspect of meaning which is usually rendered by "*the same*", and can be defined as emphatic reference to a person *etc.* with the explicit statement that this person *etc.* has already been mentioned in the context or is at least implied by it. This aspect of meaning is therefore more or less equivalent with "*the above mentioned*" resp. with "*to be mentioned below*", and in some contexts this is the best rendition *e.g.* in P. Lille 23, 8 Ἡρόδης ὁ αὐτός. More often, however, ὁ αὐτός is used with the purpose of expressing that there is no difference between the person indicated by ὁ αὐτός plus substantive together, and the person mentioned or implied by the context. The meaning of the relative pronouns is different in this respect that they are not emphatic and that their reference is restricted to persons *etc.* mentioned or implied in the same or in the preceding *sentence*. From this description it follows that the person *etc.* that are as it were repeated by ὁ αὐτός, are not always explicitly mentioned. With a number of expressions such as τὸ αὐτὸ φρονεῖν (πράσσειν, λέγειν) and the like, this has become usual, but only when they imply reciprocity. Of course these expressions can imply other comparisons, τὸ αὐτὸ φρονεῖτε for instance "*think the same as the others (whom I mentioned)*", "*think the same as you did at that time (which I mentioned)*" *etc.*, but in these cases there is a reference to explicitly mentioned or implied persons and things.

It may be doubted whether (ὁ) αὐτός and αὐτός "*he*" / "*self*" constitute one word or two. The aspects of meaning have much in common: reference to something that is supposed to be known to the addressee, and emphasis. The difference with αὐτός "*he*" / "*self*" is that (ὁ) αὐτός points to persons *etc.* with the positive assertion that they are already mentioned or implied by the context. In our opinion this difference is not so great as to necessitate the assumption of two or three words αὐτός. Moreover, as we have pointed out, the aspects 1, 2 and 3 are in complementary distribution. On the other hand we must make mention of the fact that αὐτός 1-2 and ὁ αὐτός have different series of correlative adverbs *e.g.* αὐτως "*in the very*

way" *vs.* ὁσαύτως "in the same way", αὐτοῦ "in the very place" *vs.* ὁμοῦ "in the same place" (see *par.* 9.5.10). Moreover, there are in Atticistic Koine-Greek special crasis forms by the side of the two words ὁ αὐτός, *e.g.* ταῦτοῦ *i.e.* τοῦ αὐτοῦ. Note the neuter nom./acc. sg. ταῦτόν (by the side of ταυτό) which final -ν taken over from such correlative adjectives as πόσον, ποῖον, *etc.*, and the transpositions ταυτότης (already used by Aristotle), ταῦτῳ (verb), ταῦτωμα. All this suggests that there was at least a tendency two develop two separate pronouns.

9.5.7. *Peculiarities in the Apocalypse.* The Apc. does not contain any instance of ὁ αὐτός, but it does occur elsewhere in the New Testament *e.g.* Matt. XXVI 44 προσηύξατο ἐκ τρίτου τὸν αὐτὸν λόγον εἰπὼν πάλιν (the word λόγος as such has not been mentioned in the context, but its contents are given in *vv.* 39 and 42). The non-occurrence of ὁ αὐτός in the Apc. reflects in all probability the fact that Hebrew and Aramaic did not have a special word for "the same". Gesenius-Kautzsch mention seven passages from the Old Testament in which the Hebrew pronoun **הוא** is considered to have that meaning, but it is curious to learn that the LXX have rendered only one out of these by ὁ αὐτός, namely in Psalm CII (CII) 28; the other ones are translated by εἰμι, ἐστι, or not at all.¹ In Aramaic the emphatic use of the 3rd person pronoun is also supposed to have occasionally the meaning of "the same".² The absence of ὁ αὐτός in the Apc. is therefore probably due to the fact that a Jew was not familiar with such a pronoun by the time when he started to learn Greek. It is not even used in XVIII 6 ἐν τῷ ποτηρίῳ ᾧ ἐκέρασεν κεράσατε αὐτῇ διπλοῦν which we may be inclined to translate by "in the same cup".

9.5.8. *Opposition of Number.* The opposition between αὐτός and αὐτοὶ is not the same as that between *e.g.* ἐγώ and ἡμεῖς. From passages such as Luke XI 4 and 52 (see *par.* 9.5.1), where αὐτοὶ is used in syntactical combination with ἀφίομεν and εἰσῆλθατε, it may not be concluded that the number value of αὐτοὶ is different from that in *e.g.* αὐτοὶ λέγουσιν. The heterogeneous collection "we" *i.e.* here "me and they" indicated by the verb ἀφίομεν is referred to as a

¹ *o.c.*, p. 458 note 1 (Job III 19, Is. XLI 4, XLIII 10, 13, XLVI 4, XLVIII 12, Ps. CII 28); Segal does not mention this use in his grammar.

² W. B. Stevenson, *Grammar of Palestinian Jewish Aramaic*, Oxford 1966, p. 20 *par.* 12 and 14; F. Schulthess, *Grammatik des christlich-palästinischen Aramäisch*, Hildesheim 1965, *photom. repr.*, p. 33. Cf. also the Peshitto-version of Matt. XXVI 44 (Mark XIV 39).

plurality by αὐτοὶ, namely a plurality of, so to say, persons-who-may-be-participants-or-not. Mutatis mutandis the same holds good of αὐτοὶ εἰσήλθατε.

9.5.9. *Opposition of Gender.* The only remark to be made is that neuter substantives indicating persons may be referred to either by the neuter αὐτό, or by the masculine or feminine αὐτόν *etc.*, αὐτήν *etc.* in accordance with a *non-neuter* synonym of the neuter substantive in question: Luke I 59 ἤλθον περιτεμεῖν τὸ παιδίον καὶ ἐκάλουν αὐτὸ *etc.*; Mark V 41 κρατήσας τῆς χειρὸς τοῦ παιδίου λέγει αὐτῇ *etc.* The pronouns are accented in the Nestle-edition, but were probably unemphatic: αὐτο, αὐτη.

9.5.10. *Correlative Adverbs and Further Peculiarities.*

a) By the side of αὐτός:

- (1) αὐτως "in the very manner" (N.B. penult accent)
- (2) αὐτοῦ "in the very place"
- (3) αὐτόθεν "from the very place"
- (4) αὐτόσε "to the very place"
- (5) αὐτίκα "in the very moment"

In Classical Attic and Koine Greek there were no adjectives correlated with αὐτός.

b) By the side of ὁ αὐτός:

- (1) ὡσαύτως "in the same way"
- (2) ὁμοῦ "at one and the same place; together"
- (3) ὁμόσε "to one and the same place; together"

The correlative adjective is ὁμοιος, -α, -ον "of the same kind, similar".¹ In Classical Attic its accent was like that of ἄλλοιος *etc.*: ὁμοῖος. The correlated adjective ταὐτοῖος is a late formation found first in Damascius (Vth century A.D.).

The correlated adverb ὁμῶς "in the same way, likewise" is found only in epics and tragedies, while ὅμως (with penult accent) has the meaning "all the same". The word ὁμός "one and the same" to which ὁμοῖος corresponded just as ἄλλοιος to ἄλλος, is restricted to Epic Greek.

c) Degrees of Comparison. The pronoun αὐτός is the only one of which degrees of comparison are attested. The occurrence of these degrees is, however, very incidental: they should certainly be evaluated as intentional deviations which serve a comic purpose. Of the three instances that we know of, two occur in comic poets:

¹ For the curious use of this adjective in the Apc. see *par.* 7.6.2.

αὐτότερος in Epicharmus 5, and αὐτότατος in Aristophanes *Plutus* 83.¹ The third instance is the comparative adverb αὐτοτέρως in Galenus 18 (2), 431.

9.6. *Distinguishing Pronouns*: ἄλλος and ἕτερος

9.6.1. *Declension*: ἄλλος is declined like αὐτός (neuter nom./acc. sg. ἄλλο); ἕτερος is declined like δίκαιος (neuter nom./acc. sg. ἕτερον).

Values and Meaning:

The valence and values of case, number and gender are not different from those of the adjectives. In Non-Atticistic Koine Greek ἄλλος and ἕτερος had the same lexical meaning. Since the disappearance of the dual categories ἕτερος had lost the meaning of being distinct from the other member of a pair: ἄλλος and ἕτερος had now become interchangeable and could be used even in the same sentence for stylistic variation *e.g.* Matt. XVI 14 οἱ μὲν . . . ἄλλοι δὲ . . . ἕτεροι δὲ . . . They indicate persons or things as not being identical to those of the same kind mentioned or implied by the preceding or following use of language *e.g.* Apc. XII 3 καὶ ὥφθη ἄλλο σημεῖον: the first sign is pictured in XII 1-2.

9.6.2. *Morphological Valence*.

Correlative Adverbs:

- | | |
|-------------------------|-------------------|
| (1) ἄλλως, ἑτέρως | “otherwise” |
| (2) ἀλλαχοῦ | “elsewhere” |
| (3) ἀλλαχόθεν, ἑτέρωθεν | “from elsewhere” |
| (4) ἀλλαχότε | “at another time” |

If the adverbs containing the syllable -αχ- matched adverbs without that syllable but with the same meaning, the latter were considered as Classical Attic:

Moeris *p.* 187 (Bekker) ἄλλοθι, ἄλλοθεν, ἄλλοσε· Ἀττικοί,
ἀλλαχόθι, ἀλλαχόθεν, ἀλλαχόσε· καινότερον
Ἀττικοὶ καὶ Ἑλληνες.

¹ According to H. Thesleff this superlative is not necessarily comic (*Studies in the Greek Superlative*, Soc. Scient. Fenn., Comm. Hum. Litt. XXXI-3, Helsinki 1953, *p.* 95). He compares with the Latin hapax *ipsissimus* in Plautus *Trin.* 988 (a passage so similar to Aristophanes' line that it is almost certainly an imitation of it, and also with the German pronoun *selbst* (which, however, is not and was not superlative in value to judge from F. Kluge-W. Mitzka, *Etymologisches Wörterbuch der deutschen Sprache*, Berlin 1963). We do not deny that the value of αὐτότατος is “quite myself” or “just myself” (*cf.* μεσαίτατος “quite in the middle”), but fail to see what argument may be obtained from this value against the comic character of the formation as such, which is unique just as *ipsissimus* (*cf.* *ipsimus* in Petronius LXIII 3 and LXXV 11).

Correlative Adjectives: ἄλλοιός, ἑτεροῖος "of another kind", ἄλλο-δαπός "from another country".

The Conjunction ἀλλά, different by accent from the neut. nom./acc. pl. ἄλλα, belongs also to the morphological valence of ἄλλος. Its meaning is always opposing, adversative: "otherwise", "but".

9.7. Relative Pronouns

9.7.1. Declension.

I. ὅς

	sg.			pl.		
	masc.	fem.	neuter	masc.	fem.	neuter
nom.	ὅς [os]	ἥ [e]	ὅ [o]	οἱ [oj, ü ?]	αἱ [e]	ἃ [a]
gen.	οὗ [u]	ἥς [es]	οὗ [u]	ῶν [on]	ῶν [on]	ῶν [on]
dat.	ὧ [o]	ἥ [e]	ὧ [o]	οἷς [ojs, üs ?]	αἷς [es]	οἷς [ojs, üs ?]
acc.	ὃν [on]	ἣν [en]	ὃ [o]	οὓς [us]	ἃς [as]	ἃ [a]

II. ὅστις: of this compound pronoun both components were declined *e.g.* acc. sg. masc. ὃντινα, but in the Hellenistic period the oblique cases were obsolete.

9.7.2. Values and Meaning.

9.7.2.1. *Differences in Meaning between ὅς and ὅστις.* In Classical Attic a distinction was visible between relative clauses of an essential character (containing necessary information) and relative clauses that could as it were be left out. The former were introduced by ὅστις, ἥτις, ὅτι, while the latter were headed by ὅς, ἥ, ὅ. This distinction disappears in the Hellenistic period: in the Apc. ἥτις introduces dispensable remarks at I 12 and XII 13.

Of ὅστις only the m-f. nominatives were used in Koine Greek: ὅστις, ἥτις. οἵτινες and αἵτινες, which tended to replace the nominatives ὅς, ἥ, οἱ, αἱ, no doubt in order to avoid the confusion of the latter three with the homophonous nominatives of the definite article. This is apparently the case in the Gospel of St. Luke,¹ but not in the Apc. where οἱ and αἱ were also used, for instance in V 6 and 8.

9.7.2.2. The Deictic Meaning of the Relative Pronouns.

The relative pronouns (ὅς and ὅστις) indicate persons or things as

¹ H. J. Cadbury, *The Relative Pronouns in Acts and Elsewhere*, Journ. Bibl. Lit. 42, 1923, pp. 150-157.

already mentioned or implied either by the same or by the preceding sentence.

The relative deixis consists therefore in referring to an element which is present in the utterance itself. We shall call this element by its traditional name the “antecedent”, although it does not always precede the relative pronoun. For a person or thing implied by the context there is no special name; in this case the relative pronoun is said to “include” the antecedent.

The usage of the relative pronoun referring to a person or thing mentioned by a word in the preceding sentence (“*relativer Anschluss*”) belonged to more literary use of language. An instance from the N.T. is Acts XIII 30 ὁ δὲ θεὸς ἡγείρεν αὐτὸν ἐκ νεκρῶν. 31. ὃς ὥφθη ἐπὶ ἡμέρας πλείους (cf. Heb. VII 27). The reference to the antecedent is usually accompanied by concord of the gender and number categories of relative pronoun and antecedent. This concord or agreement constitutes an important syntagmatical indication when the sentence contains more than one word which the hearer may see as the antecedent. There is in principle no agreement between the case categories of antecedent and pronoun, because each depends in its own way on another word of the sentence. Even when the cases happen to be of the same kind there is in reality no agreement, for instance in οὐκ οἶδα τὸν ἄνδρα, ὃν τιμῶσιν, because one accusative depends on οἶδα, the other on τιμῶσιν. Similar cases may be said to agree only when one of them is adapted or attracted to the other, contrary to the case category which the syntactical combination with the verb *etc.* would require (instances below 9.7.2.3.4.). As the usual agreement of gender and number could incidentally be neglected, it follows that there were different degrees of agreement between pronoun and antecedent. In the next paragraph these differences will be taken as the basis for our subdivision of uses. We have the impression that the relative pronoun was usually connected with a finite verb, and that it occurred only rarely in nominal sentences like Apc. I 4-5 (C) καὶ ἀπὸ τῶν ἑπτὰ πνευμάτων ᾧ ἐνώπιον τοῦ θρόνου αὐτοῦ (A, ⲭ : τῶν ἐνώπιον).

9.7.2.3. Subdivision of Uses.

9.7.2.3.1. a) *None of the categories concordant.* This usage is the so-called “*constructio ad sensum*”. A good instance is found in Philipp. II 15 ἵνα γένησθε . . . τέκνα θεοῦ ἁμῶμα μέσον γενεᾶς σκολιᾶς . . . ἐν οἷς φαίνεσθε ὡς φωστῆρες ἐν κόσμῳ. The pronoun οἷς is plural and masculine because the author pays more attention to the

members constituting the γενεὰ σκολιά, than to the grammatical status of this γενεά. Under this heading come also the instances of complete attraction of the pronoun to the predicate noun in the sentence *e.g.* Acts XVI 12 εἰς Φιλίππους, ἥτις ἐστὶν πρώτη τῆς μερίδος Μακεδονίας πόλις, κολωνία. and Apc V 8 ἔχοντες ἕκαστος κιθάραν καὶ φιάλας χρυσᾶς γεμούσας θυμιαμάτων αἱ εἰσιν αἱ προσευχαί *ss.*

9.7.2.3.2. *b) One of the categories concordant.* There are two possibilities: the number categories may be concordant or the categories of gender only. An instance of each:

number: Gal. IV 19 τέκνα μου οὗς πάλιν ὠδίνω

gender: 2 Pet. III 1: δευτέραν ὑμῖν γράφω ἐπιστολήν, ἐν αἷς (plural, because there are now two letters) διεγείρω *etc.*

9.7.2.3.3. *c) Two of the categories concordant.* Number and gender categories concordant, the usual type of agreement *e.g.* Apc. I 20 τῶν ἐπτά ἀστέρων οὗς εἶδες. Relative constructions in which number and case, or gender and case are concordant would combine construction ad sensum and case attraction. We do not know of any instances, but think that the former combination might occur, for instance in a phrase like μετὰ τοῦ κορασίου ἧς εἶδον: the gender of τὸ κοράσιον is neuter, but the word indicates a female person.

9.7.2.3.4. *d) Three categories concordant.* This usage is traditionally called "attraction", because the case category has been attracted to that of the antecedent, and is therefore not in line with the syntactical construction in which the pronoun takes part. Two possibilities can be distinguished with regard to the position of the relative pronoun. It can have its usual position, somewhere after the antecedent, for instance in Acts I 22 ἄχρι τῆς ἡμέρας ἧς ἀνελήμφθῃ, or it is placed before the antecedent which, however, may not be preceded by the definite article *e.g.* Luke I 20 ἄχρι ἧς ἡμέρας γένηται ταῦτα. In the latter construction the finite verb is sometimes inserted between pronoun and antecedent: Luke XXIV 1 φέρουσαι ἃ ἠτοίμασαν ἀρώματα, and John VI 14 ἰδόντες δ' ἐποίησεν σημεῖον. Instances like 1 Cor. X 16 τὸν ἄρτον ὃν κλῶμεν οὐχὶ κοινωνία . . . ἐστίν; "the bread which we break isn't it community?" show the reverse type of attraction: the case of the antecedent has now been adapted to that of the relative pronoun.

9.7.2.3.5. *Absence of Antecedent.* Whenever the relative does not refer to an antecedent indicated by a word in the same or in the preceding sentence as in the above instances, it refers to a person or thing *implied* by the context. This usage is the so-called relative con-

struction with included antecedent. As far as we can see such relative pronouns are always accompanied by two finite verbs *e.g.* Apc. I 19 γράψον οὖν ἃ εἶδες. It depends of course also on the context whether for instance δν is to be interpreted as οὗτος, δν or as τοῦτον, δν in such a phrase as δν ὁρᾷ, οἶδεν. This may have the meaning "he knows the one whom he sees" or "the one whom he sees knows". The case category of the relative pronoun is either the one required by the syntactical construction of which the pronoun is part, or the case category which the antecedent *would* have had, had it been present. The latter construction, too, is traditionally called "attraction", compare Mark XV 12 C, καὶ τί οὖν ποιήσω δν λέγετε τὸν βασιλέα τῶν Ἰουδαίων; with τί οὖν ποιήσω ἃ λέγετε *ss.*, which is not attested in any manuscript, but must have been the underlying Greek of the Gothic version. This type of attraction is regular with prepositions and substantives (adjectives, pronouns) upon which the implied antecedent *would* have depended, *e.g.* Luke IX 36 ἀπήγγειλαν . . . οὐδὲν ὧν ἐώρακαν. In the Apc.-A the usage is confined to II 25 κρατήσατε ἕως οὗ ἃν ἴξω (C, καὶ αὐτοὶ οὐ; 025, 046 αὐτοὶ οὐ).

9.7.3. *Peculiarities in the Apocalypse.* A Semitic peculiarity of the Apc. is the occurrence of the so-called resumptive pronouns and adverbs:

III 8 ἣν οὐδεὶς δύναται κλεῖσαι αὐτήν (VII 2, 9 (*mss.*; A: καὶ); XIII 8, 12; XVII 2? and XX 8);

XII 6 ὅπου ἔχει ἐκεῖ τόπον ἡτοιμασμένον (XII 14, XVII 9).

This additional pronoun or adverb can be explained from the Hebrew or Aramaic relative particles **וְ** and **וּ**, which are indifferent in value as to person, thing, place, and may therefore be accompanied in these languages by elucidating pronouns and adverbs.

9.7.4. *Correlative Adverbs etc. of ὅς.*

a) Correlative Adverbs.

- (1) ὡς "how", "as"
- (2) οὗ "where"
- (3) ὅθεν "whence"
- (4) ὅτε "when"
- (5) ἡνίκα "when"

b) Correlative Adjectives.

- (1) οἷος, οἷα, οἷον "such as", "as"
- (2) ὅσος, ὅση, ὅσον "as big as", "as much as"
- (3) ἡλίκος, ἡλίκη, ἡλίκον "as old as", "as big as".

These adjectives indicate a size or quality which is either mentioned as such in the context (a), or which is implied by it (b):

a) Apc. XVIII 7 ὅσα ἐδόξασεν αὐτήν . . . τοσοῦτον δότε αὐτῇ βασιανισμὸν

b) Apc. III 19 ὅσους ἐὰν φιλῶ ἐλέγχω

XXI 16 τὸ μῆκος αὐτῆς ὅσον καὶ τὸ πλάτος (mss.; A: *lac.*)

The plural ὅσοι "as many as" takes part in the category of the multiplicative adverbs of the indefinite cardinal system, *e.g.* Apc. XI 6 ὁσάκις.

c) The relative pronoun ὅς and its correlative adjectives and adverbs take part in a category of emphasis whose form can be described by the formula "relative pronoun (adverb, adjective) of whatever case category plus -περ", *e.g.* ὅς—ὅσπερ, ὡς—ὥσπερ, οὗ—οὗπερ, ὅσος—ὅσοσπερ, *etc.*

In non-literary Koine Greek these words were hardly used, and in the N.T., too, ὅσπερ is found only once (at Mark XV 6), but ὥσπερ is of frequent occurrence. The further members of this -περ-category were some 35 adverbs and conjunctions such as ἐπειδὴ—ἐπειδὴπερ, εἰ—εἰπερ, καὶ—καίπερ, *etc.* As these were *not* falling into disuse like the pronouns mentioned, the question may be raised whether in Koine Greek this category was characteristic of conjunctions and adverbs. These adverbs do not belong to the category characterized by -ως except for ὥσπερ and καθὼσπερ; they are either correlative adverbs or words that do not belong to any morphological system, but are traditionally called adverbs because of their syntactical behaviour.

9.7.5. *Correlative Adverbs etc. of ὅστις.*

a) Correlative Adverbs.

(1) ὅπως "however", "in order to"

(2) ὅπου "wherever, where"

(3) ὅποτε "whenever"

(4) ὅπηνίκα "whenever"

b) Correlative Adjectives:

(1) ὅποῖος *etc.* "of whatever kind"

(2) ὅπόσος *etc.* "of whatever size"

(3) ὅπηλικός *etc.* "of whatever age or size"

(4) (ὅποδαπός *etc.* "from what country" not in Koine Greek)

The plural ὅποσοι "whatever number of" takes part in the category of the ordinal numerals: ὅπόστος "having whatever place in the series", and in the category of the multiplicative adverb: ὅποσάκις "whatever number of times". Moreover, this word takes part in some of the correlative adverb categories: ὅποσαχῶς, ὅποσαχοῦ.

9.8. *Demonstrative Pronouns*9.8.1. *Declension.*

a)	<i>m.sg.</i>	<i>f.sg.</i>	<i>n.sg.</i>	<i>m.pl.</i>	<i>f.pl.</i>	<i>n.pl.</i>
nom.	οὗτος	αὕτη	τοῦτο	οὗτοι	αὗται	ταῦτα
gen.	τούτου	ταύτης	τούτου	τούτων	τούτων	τούτων
dat.	τούτῳ	ταύτῃ	τούτῳ	τούτοις	ταύταις	τούτοις
acc.	τούτον	ταύτην	τοῦτο	τούτους	ταύτας	ταῦτα

The distribution of the bases οὗτ(ο) [út(o)], τουτ(ο) [tút(o)], αὗτ(η) [áwt(e)] and ταύτ(η) [táwt(e)] is subject to the following rules:

οὗτ- and αὗτ- occur only in the masculine and feminine nominatives; οὗτ- and τουτ- occur when the following syllable contains one of the vowels -ω-/-ο- [o], -ου-[u], -οι-[oj], ü?

αὗτ- and ταυτ- occur when the following syllable contains one of the vowels α [a], η [e], αι [ε]; consequently the fem. gen. pl. is τούτων not ταυτῶν¹ and the neuter nom./acc. pl. is ταῦτα not τοῦτα.²

b) The pronoun ἐκεῖνος, ἐκείνη, ἐκεῖνο is declined like αὐτό; the neuter nom./acc. sg. is therefore without -ν.

c) The obsolete pronoun ὅδε, ἥδε, τόδε is declined like the definite article followed by the element -δε; the accent is penult.

9.8.2. *Values.* As all these pronouns may be used either as substantives or as attributive adjectives the values and valence of the categories of number, gender and case are like those described for the adjective system.

In the Classical Attic system ὅδε—οὗτος—ἐκεῖνος each pronoun indicated a spatial or temporal proximity: ὅδε the addresser's, οὗτος the addressee's, ἐκεῖνος that of the non-participant(s). In combination with a substantive ὅδε could even refer to the addresser as such *e.g.* Aeschylus *Ag.* 1438 γυναικὶς τῇσδε (*i.e.* ἐμοῦ), *cf.* Sophocles, *Oed. Tyr.* 534 and 815, and οὗτος could refer to the addressee *e.g.* Aeschylus, *Supp.* 911 οὗτος, τί ποιεῖς; where the nominative performs the task of the vocative, a category which the pronouns lack.³

This system was destroyed by the disappearance in Hellenistic times of the pronoun ὅδε, which compelled οὗτος to change its mean-

¹ This form occurs, with penult acute, as the neut. gen. pl. in Elean.

² Found in the dialects of Euboea and Delphi; *cf.* S.E.G. II 773 (Doura, Syria).

³ *Cf.* P. Haupt, *The Son of Man = hic homo = ego*, Journ. Bibl. Lit. 40, 1921, p. 183.

ing in such a way that it did no longer point only to persons or things in the neighbourhood of the addressee, but to persons or things present in or contemporaneous with the speech situation, irrespective of the distinction between addresser and addressee *e.g.* Apc. I 19 γράψον οὖν . . . ἃ μέλλει γείνεσθαι μετὰ ταῦτα "what is to be hereafter". When οὗτος refers to things *etc.* discussed in actual speech it implies that these things have been (or will be) discussed in the immediately preceding or following use of language *e.g.* Luke I 39 ἐν ταῖς ἡμέραις ταύταις "in these days" *i.e.* "of which I am now speaking", whereas ἐκεῖνος refers to things discussed or mentioned before those referred to (or: to which one would refer) by οὗτος *e.g.* John VII 45 ἦλθον οὖν οἱ ὑπηρέται πρὸς τοὺς ἀρχιερεῖς καὶ εἶπον αὐτοῖς ἐκεῖνοι *i.e.* "the former", not the immediately preceding ἀρχιερεῖς. Things that have been mentioned may also be seen, not in their relation to the language used in the speech situation, but in their relation to the speech situation only: when they are separated from the speech situation by a great distance or a long time they are referred to by ἐκεῖνος. This explains why sometimes one and the same thing is first referred to by ἐκεῖνος and next by οὗτος *e.g.* Luke II 1 ἐν ταῖς ἡμέραις ἐκείναις *i.e.* days long ago by the time of St. Luke, but historically spoken these are the same days as those referred to by ταύταις in Luke I 39 (above).

A second instance is Apc. IX 6 ἐν ταῖς ἡμέραις ἐκείναις ζη[τήσου]σιν . . . τὸν θάνατον, which means "in those (future) days" (*cf.* XVI, 14: 046, 051), but in IX 12 it says μετὰ ταῦτα.

It is, however, equally well possible to consider the passages mentioned, which contain οὗτος, as proof of the unmarked status of this pronoun as opposed to ἐκεῖνος; the value of οὗτος as given in the scheme below (*par.* 9.12.4) would then have to be modified to "space/time of participant or non-participant resp. use of language distant in time or not".

9.8.3. *Peculiarities in the Apocalypse.*

1) The pronoun ὅδε which was obsolete in Koine-Greek is found seven times in the Apc., but only in the archaic opening formula of the Letters to the Seven Churches: "τάδε λέγει . . .", which introduces the words that are to follow. This formula can be considered a quotation from the LXX where it occurs over 250 times to introduce the words of God. In the N.T. there are only three further instances of ὅδε, one of them also in a "τάδε λέγει" (Acts XXI 11).

(2) The feminine αὐτή is sometimes equivalent to τοῦτο in accordance with the value of the Hebrew demonstrative fem. הַזֶּה This Hebraism is not found in the Apc., but cf. e.g. Matt. XXI 42 παρὰ κυρίου ἐγένετο αὐτή, which is a quotation from Psalm CXVII 23 (CXVIII).

3) The figures of the occurrences of οὗτος and ἐκεῖνος in the Apc. are resp. 54 against 2. The low frequency of ἐκεῖνος is almost certainly due to the author's inclination towards vividly picturing the scenes of his visions as though again seeing them before his eyes. This is also reflected by his use of tenses: time and again he shifts from using the aorist (he saw these visions in the past reckoned from the moment of writing) to using the present tense (he sees them again), and incidentally when he is aware of the fact that these visions are concerned with future events he may shift to the future tense. The use of οὗτος fits quite naturally in with such a tendency towards life representation. The two instances of ἐκεῖνος are:

IX 6 ἐν ταῖς ἡμέραις ἐκείναις ζή[τήσου]σιν οἱ ἄν(θρωπ)οὶ τὸν θάνατον, where the author is reflecting on the future;

XI 13 ἐν ἐκείνῃ τῇ ὥρᾳ ἐγένετο σ(ε)ισμὸς, where he is apparently returning to the time when he actually saw the vision: in the preceding XI 10 he used present and future tenses.

This infrequent use of ἐκεῖνος is a marked contrast to its frequency in the Gospel of St. John where it occurs 70 times.

9.8.4. *Correlative Adverbs and Adjectives.*

a) Adverbs correlated with οὗτος:

οὕτως "so; in this way"

ῶδε "here; hither"

ἐντεῦθεν "hence; here"

ἐνθάδε "hither; here", also δεῦρο, δεῦτε ¹

νῦν "now"

Only οὕτω(ς) bears a formal likeness to οὗτος; the form οὕτως is used before words with initial vowel, in the Apc.: II 15, III 16, IX

¹ This adverb has been transposed to the imperative category and is used as 2nd p.pl. e.g. at Apc. XIX 17. In Attic inscriptions one may also encounter the transpositions δεῦρε and δεύρου cf. παιδεύε and middle παιδεύου (Schwyzer, *o.c.*, I, p. 632). In Koine Greek δεῦρο and δεῦτε could precede the adhortative subjunctive as mere particles without any implication of movement towards the speaker. A good instance is Ex. III 10 καὶ νῦν δεῦρο ἀποστείλω σε πρὸς Φαραῶ, where movement had even been forbidden in the previous v. 5 μὴ ἐγγίσσης ῶδε. In the Apc. the instances do, however, not exclude actual movement: XVII 1, XIX 17, XXI 9.

17, XVIII 21 (A: *lac.*), while οὕτω is used before words with initial consonant (Apc. XVI 18); however, οὕτως is found before a consonant in Apc. XI 5 (*ms.* A omits the word); ¹ ὥδε was originally correlated with the now obsolete pronoun ὅδε and had the meaning "in this way"; ὥδεθεν "hence" is found P. Cairo Zen. 164, 2 (IIIrd cent. B.C.).

b) Adverbs correlated with ἐκεῖνος:

ἐκεῖνως "in that way"
ἐκεῖ "there; thither"
ἐκεῖθεν "thence; thither"
ἐκεῖσε "thither; there"
τότε "then"

c) Only the pronoun οὗτος has correlated adjectives:

τοιοῦτος, τοιαύτη, τοιοῦτο(ν) "of this kind; such"
τοσοῦτος, τοσαύτη, τοσοῦτο(ν) "of this size"
τηλικοῦτος, τηλικαύτη, τηλικοῦτο(ν) "of this age; of this size".²

The distribution of -ου- and -αυ- is exactly as in the declension of οὔτος. The neuter nom./acc. sg. wavers between -ο and -ον: the latter is found in Apc. XVIII 7 τοσοῦτον. This uncertainty in the ending underlines the intermediate position of these words between pronouns and ordinary adjectives like δίκαιος—κόκκινος. The plural τοσοῦτοι, τοσαῦται, τοσαῦτα, has compared with the singular an extra aspect of meaning: "so many". Because of this aspect and the presence of correlated adverbs τοσανταχῶς "in so many ways" and τοσαντάκις "so many times," which have parallels in the numeral system, τοσοῦτοι *etc.* can be reckoned to belong to the indefinite numerals. The correlative adjective τοσοῦτος occupies therefore a position in between pronoun and numeral.

9.9. Indefinite Pronouns

9.9.1. Declension.

	<i>m-f.sg.</i>	<i>n.sg.</i>	<i>m-f.pl.</i>	<i>n.pl.</i>	<i>m.sg.</i>	<i>f.sg.</i>	<i>n.sg.</i>	<i>m-f.pl.</i> ³
nom.	τις	τι	τινές	τινά	οὐδεῖς	οὐδεμία	οὐδέν	οὐδένες
gen.	τινός	τινός	τινῶν	τινῶν	οὐδενός	οὐδεμιᾶς	οὐδενός	οὐδένων
dat.	τινί	τινί	τισίν	τισίν	οὐδενί	οὐδεμιᾷ	οὐδενί	οὐδέσιν
acc.	τινά	τι	τινάς	τινά	οὐδένα	οὐδεμίαν	οὐδέν	οὐδένας

¹ In XVI 18 some cursives have οὕτως contrary to the rule, while in XI 5 some of them have the expected οὔτω.

² ἐκεῖνινος "made of that material" is not found in Koine Greek.

³ Neuter nom./acc. pl. not attested.

Accentuation: *τίς, τι* when sentence initial; *τίς, τί* when followed by an enclitic word *e.g.* *δυνήσεται τίς γε*; as the pronoun *τις* belongs itself to the enclitics (see *par.* 4.) there may follow another case of *τις*: *ἔλεγεν τίς τινι*. Elsewhere: *τις, τι*. Disyllabics: same rules, but after paroxytona: *ἵπποι τινές* within sentence, *ἵπποι τινές* at the end.

9.9.2 *Values and Meaning*. By using the pronoun *τις* the speaker refrains from giving any details on the identity of the persons or things indicated; they are therefore either known or unknown to the addressee. This reserve on the part of the speaker can have a special effect, for instance, when a person is indeed known to the addressee, but what really matters is the attitude of the speaker. As opposed to the definite article, which assumes persons *etc.* to be known to the addressee the pronoun *τις* is probably unmarked.

The negative counterpart of *τις* is *οὐδείς*: “no one known or unknown, nobody”. It should not be confused with *οὐδὲ εἷς* which has the meaning “not one”, and can be reckoned with the numerals, and has a correlated adverb *οὐδενάκι* “not once”. By the side of *οὐδείς* occur *μηδείς, μηδεμία, μηδέν*; the difference between these pronouns runs exactly parallel to that of the two negatives *οὐ* and *μή*.

9.9.3. *Peculiarities in the Apc.* *Τίς* and *οὐδείς, μηδείς* are used in the Apc. only substantivally, *τις* being always preceded by the conjunction *εἰ* or *ἐάν*: XI 5, 5; XIII 9, 10, 10; XIV 9, (A: *lac.*), 11 and XX 15. Instead of the adjectival *τις* the author of the Apc. makes use of *εἷς, μία, ἓν* which has then the meaning “a, a certain”: VIII 13, IX 13, XVIII 21, XIX 17, and instead of the adjectival *οὐδείς*: *οὐ (μή) . . . πᾶς* or *πᾶς . . . οὐ (μή)* *cf.* Hebrew *לֹא . . . כָּל* and *כָּל . . . לֹא*: VII 16, IX 4; XVIII 22, XXI 27, XXII 3. The only exception is found in *mss.* C, 046: VII 1 *μήτε ἐπὶ τι δένδρον* (A: *μήτε ἐπὶ δένδρου*), to which we prefer the reading of *ms.* B: *μήτε ἐπὶ πᾶν δένδρον*. The word *οὐδέν* in III 17 A *οὐδέν χρεῖαν ἔχω* has the meaning of “not” and may foreshadow Modern Greek *δέν*; it was probably corrected by the scribe of B: *οὐδενὸς χρεῖαν ἔχω*.

Εἷς I “one” (Apc. XVII 12, 13, 17; XVIII 8, 10, 17, 19; XXI 21) and *εἷς* II “a, a certain” are to be considered as two different words, as there do not seem to be any transitional aspects of meaning in between. Modern Greek *ἓνας, μία, ἓνα* is likewise either cardinal numeral or indefinite article.

9.9.4. *Correlative Adverbs and Adjectives.*

a) *πῶς* “somehow” negated: $\left. \begin{array}{l} \text{οὐδαμῶς, μηδαμῶς} \\ \text{οὐπῶς, μήπως} \end{array} \right\} \text{“in no way”}$

που	somewhere, somehow"	οὐδαμοῦ, μηδαμοῦ	"nowhere"
ποθεν	"from somewhere"	οὐδαμόθεν, μηδαμόθεν	"from no- where"
—	—	οὐδαμόσε, μηδαμόσε	"to nowhere"
ποτέ	"at some time"	οὔποτε, μήποτε	} "never". ¹
		οὐδέποτε, μηδέποτε	
b) ποιός	"of some kind"		
ποσός	"of some size"		
πηλῦκος	"of some age (or size)"		

These correl. adjectives, which do not occur in the N.T., are declined like the adjectives δίκαιος—κόκκινος, but they have no vocative, or degrees of comparison. The neuter nom./acc. sg. is always in -ον *e.g.* ποιόν, which indicates that they occupy a position in between pronouns and ordinary adjectives.

The plural ποσoί has an aspect of meaning "a number of . . .", according to which it might be reckoned to the numeral system (*cf. par.* 10.3.1.2). Like a numeral it takes part in the ordinal opposition: ποστός "holding some place in the series of . . .", and has a correlated multiplicative adverb ποσάκις "a number of times".

9.10. Interrogative Pronouns

9.10.1. Declension.

	<i>m-f.sg.</i>	<i>n.sg.</i>	<i>m-f.pl.</i>	<i>n.pl.</i>
nom.	τίς	τί	τίνες	τίνα
gen.	τίνος	τίνος	τίνων	τίνων
dat.	τίνι	τίνι	τίσιν	τίσιν
acc.	τίνα	τί	τίνας	τίνα

Accentuation. The acute accent of τίς and τί is never within the sentence modified into the grave accent: τίς ποιεῖ; and τί ποιεῖς;. There can be no doubt that the interrogative τίς has some historical connection with the indefinite τις, of which it was in all probability

¹ As πως, που, *etc.* are enclitics they are written as one word together with a preceding οὐ or μή, οὐδέ or μηδέ *e.g.* μήπως "lest in any way" and οὐδέποτε "and not ever". For the accentuation see 9.9.1.

at some time the emphatic counterpart. It may have been mainly used, just like the Latin *quisquam*, in negative and interrogative sentences. From the latter it adopted then the exclusively interrogative meaning which it has had from Homer to the present day, and broke up the original parallelism with the pairs ἐμέ: με *etc.* and ὅσπερ: ὅς. In Latin, however, both the interrogative pronouns and the indefinite pronouns have emphatic counterparts:

quis? — *quisnam?*

aliquis — *quisquam*.

9.10.2. *Values and Meaning.* In N.T. Greek there is a tendency to use τίς only as a substantive, whereas the correlated adjective ποῖος performs the adjectival rôle; compare *e.g.* Apc. V 2 τίς ἄξιος ἀνοῖξαι τὸ βιβλίον with III 3 οὐ μὴ γινῶς ποίαν ὥραν ἤξω. An instance of τίς used as an adjective is Luke XIV 31 τίς βασιλεὺς πορευόμενος *ss.* Accordingly the values of the case-number and gender categories of τίς can be compared with those of a substantive.

By using an interrogative pronoun (adjective, adverb) the speaker does not assume that the persons or things to whom they (*resp.* the substantives with which they form a word group) refer are known to the addressee: they may be known or unknown, just as the persons *etc.*, referred to by the indefinite pronouns. The fundamental difference with the latter is that now the speaker expects the addressee to give him information on the persons or things. Contextually, however, it may be apparent that the speaker is already in possession of the necessary knowledge. In this case there are two possibilities:

a) He merely wants to check whether the addressee has the information *e.g.* Apc. VII 13-14 οὗτοι οἱ περιβεβλημένοι τὰς στολὰς τὰς λευκάς, τίνες εἰσὶν καὶ πόθεν ἦλθον; καὶ εἴρηκα αὐτοῖς· κ(ύρι)ε, σὺ οἶδας.

b) He assumes that the addressee may give the very answer that he himself has already in mind. This usage is the so called "rhetorical question" *e.g.* Rom. VIII 31 εἰ ὁ θεὸς ὑπὲρ ἡμῶν, τίς καθ' ἡμῶν; The response to positive questions such as this one would very often be negative: "οὐδεὶς"; to negative questions the implied answer is "πᾶς" or "ἕκαστος".

In indirect questions the interrogative pronoun has virtually the same meaning as a relative pronoun with included antecedent *e.g.* Apc. II 11 ὁ ἔχων οὖς ἀκουσάτω τί τὸ πν(εῦμ)α λέγει.¹

¹ Cf. Schwyzer, *o.c.*, II, p. 644.

9.10.3. *Correlative Adverbs and Adjectives.*

- | | |
|-----------------------|----------------------------------|
| a) πῶς "how?" | b) ποῖος "of what kind?" |
| ποῦ "where? whither?" | πόσος "of what size?" |
| πόθεν "whence?" | πηλίκος "of what age (or size)?" |
| πότε "when?" | ποδαπός "from what country?" |

The correl. adjectives are declined like δίκαιος—κόκκινος; hence, the neuter nom./acc. sg. ποῖον, etc. Just as the indefinite ποσὸί the plural πόσοι has an aspect of meaning by which it may be reckoned among the numerals: "how many?"; moreover, it has an ordinal ποστὸς "how manieth?" and some correlated adverbs: ποσάκις "how many times?", ποσαχῶς "in how many manners?", ποσαχοῦ "in how many places?", which also bring out the affinity with the numeral system.

9.11. *The Definite Article*

We consider the definite article to belong to the pronominal system because of the following peculiarities:

- it is a deictic word as the meaning cannot be described without involving the addressee;
- its declension does not contain a vocative category;
- categories of comparison are absent;
- the neuter nom./acc. sg. ends in -ο, not in -ον.

Like the personal pronouns ἐγώ and σύ it has no correlated adverbs or adjectives, but has its oppositions of gender in common with αὐτός and the remaining pronouns.

9.11.1. *Declension*

	<i>singular</i>			<i>plural</i>		
	<i>m.</i>	<i>f.</i>	<i>n.</i>	<i>m.</i>	<i>f.</i>	<i>n.</i>
nom.	ὁ	ἡ	τὸ	οἱ	αἱ	τὰ
gen.	τοῦ	τῆς	τοῦ	τῶν	τῶν	τῶν
dat.	τῷ	τῇ	τῷ	τοῖς	ταῖς	τοῖς
acc.	τὸν	τὴν	τὸ	τούς	τάς	τὰ

Remarks. Note the absence of a nominative [-ς] in the masc. nom. sg. The masc. and fem. nominatives have no initial [t-] just as those of οὗτος (9.8.1).

9.11.2. *Values.* As the article cannot be used without a following substantive or substantivated word it is important to distinguish:

- the combination with words taking part in case categories;
- the combination with words which do not take part in case categories.

In a phrase like εἶδον τὸν ἀδελφόν the values of case, number and gender of τὸν play a subordinate rôle, as the same values are also correlated with ἀδελφόν (in opposition to *e.g.* ἀδελφαί). The values of the article perform now the task of indicating the syntactical connection between τὸν and ἀδελφόν, whereas the values and valence of the substantive ἀδελφόν, namely “accusative”, “singular” and “masculine” are fully relevant. However, the article has a relevant value of gender, when it is used with a substantivized adjective, which has only one form for the masculine and feminine gender. For instance in the opposition: τοὺς ἀδίκους—τὰς ἀδίκους, it is the articles that express the gender values masculine *vs.* feminine, whereas the number value and case valence are correlated with both words. In the pair τοὺς καλοὺς—τὰς καλὰς the articles and the adjectives are correlated with all three: with number, gender and case. These valence and values are all correlated with the article in substantivized indeclinables and prepositional groups *e.g.* Mark IV 10 οἱ περὶ αὐτὸν.

9.11.3. *Meaning.* The definite article is always part of a word group consisting of article plus substantive (resp. substantivized adjective or indeclinable). By using the article the speaker assumes that the persons or things indicated by the second part of the word group are known to the addressee.

The absence of the article does not necessarily mean that a person or thing is *unknown* to the addressee: they may be known or unknown. The wordgroup article-substantive, therefore, is as it were marked as opposed to a substantive without the article. A single instance may suffice: when the author of the Apocalypse speaks for the first time about the four animals round the throne he does not introduce them by using the definite article, because he assumes or presumes that it is still uncertain whether the addressee (or the reader) knows these animals or not: Apc. IV 6 καὶ ἐμ μέσῳ τοῦ θρόνου καὶ κύκλῳ τοῦ θρόνου τέσσερα ζῷα *etc.* It does not matter that this assumption may be wholly unreasonable, what matters is the subjective attitude of the speaker. When St. John mentions the animals for the second time he is aware of the fact that they are now known to the addressee, and therefore he uses the article: IV 8 καὶ τὰ τέσσερα ζῷα . . . γέμουσιν ὀφθαλμῶν.

There exist of course classes of things that can always be assumed as known to any addressee, like parts of the body, *e.g.* Apc. II 1 τῇ δεξιᾷ (χειρὶ), pieces of clothing, *e.g.* Matt. V 40 τὸ ἱμάτιον, celestial

bodies, e.g. Apc. XII 1 τὸν ἥλιον and ἡ σελήνη. Specific things which John assumes as immediately known to his readers, as readers of Apocalyptic literature, are apparently:

VI 4 λαβεῖν τὴν εἰρήνην τῆς γῆς (the “*Pax Romana*”?)

IX 1 τοῦ φρέατος τῆς ἀβύσσου

X 3 αἱ ἐπτὰ βρονταὶ

XI 3 τοῖς δυσὶν μάρτυσίν μου

XI 19 ἡ κιβωτὸς τῆς διαθήκης

XVI 14 τὸν πόλεμον (“the War of the End”).

Besides the meaning described, which is usually called the “anaphorical” (aspect of) meaning, the traditional grammars mention some more aspects of meaning:

a) The so called “*generic article*” whose existence we have already denied in our discussion of the plural value (*par.* 6.2.1.2). The generic aspect “man, man in general, the species called man” is correlated both with ἄνθρωπος and ὁ ἄνθρωπος, and therefore not linked with the article, which merely indicates that the species indicated by the substantive *etc.* is known, and this is of course more often the case than not.

b) The so called *article “par excellence”* or κατ’ ἐξοχήν, indicating that the word it precedes refers to a thing of an outstanding character e.g. John XIV 6 ἐγώ εἰμι ἡ ὁδὸς “I am the Way” as opposed to other, inferior ὁδοὶ like Pharisaism *etc.* In our opinion neither this aspect of meaning is necessarily linked with the presence of the article, but with the substantive (or substantivized word) itself. It is certainly possible to draw up a chain of transitions between this aspect and the ordinary anaphorical meaning, for instance:

from the meaning “known to the addressee in general”,

via “known to the addressee in the specific situation”: Mk. VI 3 οὐχ οὗτός ἐστιν ὁ τέκτων “the well known (perhaps the only) carpenter in Nazareth”,

via “the only one that can be known to the addressee” because there is only one of the kind in the situation e.g. Mt. XXVII 2 καὶ παρέδωκαν Πιλάτῳ τῷ ἡγεμόνι,

via “the only one deserving to be known to the addressee in the situation” e.g. Apc. III 17 οὐκ οἶδας ὅτι σὺ εἶ ὁ ταλαίπω[ρ]ος *etc. i.e.* among the angels of the seven churches,

to “the only one deserving to be known to the addressee in general” which is the aspect “*par excellence*” e.g. John III 10

σὺ εἶ ὁ διδάσκαλος τοῦ Ἰσραήλ *i.e.* as opposed to all other teachers in Israel. Further instances are: Plato *Gorgias* 485d ὁ ποιητής *i.e.* Homer; Plutarch 2, 115b ὁ φιλόσοφος *i.e.* Aristotle; Hermogenes *Inv.* 4, 1 ὁ ῥήτωρ *i.e.* Demosthenes. The above chain should be understood as a series of contiguous aspects of the article, not as a pedigree showing how these aspects arose historically from one another.

On the other hand quite a different opinion may be held: the groups consisting of article plus substantive having this aspect "par excellence", may be considered as pregnant or emphatical substantives preceded by the article, because the persons or things indicated are known to the addressee. As such pregnant words also occur without the article it is clear that the aspect "par excellence" is not an aspect of meaning of the article but of the substantive. An anarthrous instance is John I 47 ἴδε ἀληθῶς Ἰσραηλίτης ἐν ᾧ δόλος οὐκ ἔστιν "verily an Israelite (par excellence) in whom there is no deception".

c) As to the so called "*distributive aspect*" of the article we can make about the same remarks. Let us take for instance Apc. VI 6 χοῦ[νιξ] σίτου δηναρίου καὶ τρεῖς χοίνικες κριθῶν τοῦ δηναρίου (the article is found in *ms. A* only). One might say that in τοῦ δηναρίου the article is the carrier of the distributive connotation: "per denarius".¹ Our passage shows, however, that in such distributive contexts the word indicating the measure or the unit of time or money need not have the article, and consequently that the distributive aspect is not linked with the article. As it is not a specific denarius which is meant but just any denarius (or collection of coins worth a denarius) we hold the opinion that δηναρίου is used generically. Only when "metrical words" (weights, measures, *etc.*) are generic this aspect of distribution may be present.

As only *ms. A* has in VI 6 an articular δηναρίου it is tempting to consider this article as a later insertion. It is, however, difficult to say what may have been the reason why it was added only to the second δηναρίου.

9.II.4. *The Substantivizing Article.* It has already been observed that the presence of the article with indeclinable words, and with word groups or whole sentences (quotations) gives to these the syntactical valence of a substantive. Some special remarks must be made.

¹ So Blass-Debrunner, *o.c.*, *par.* 252.

9.II.4.1. *Neuter Article and Infinitive*. In the nominative/accusative *i.e.* τὸ plus infinitive the article has its normal deictic meaning if it is not preceded by a preposition. The gen. τοῦ and the dat. τῷ, however, may serve only to furnish the infinitive with a greater syntactical valence, and need not have any deictic force. A special case are the infinitives preceded by τοῦ, which are used by the side of those without τοῦ to express a purpose, and do not depend on a preposition or other word requiring the genitive. We cannot detect any semantical difference between the two kinds but it is curious to see that St. Luke adds the article in VIII 5, where he makes use of Mark IV 3, which runs ἐξῆλθεν ὁ σπείρων σπεῖραι (κ*, B, W). Blass-Debrunner remark that this independent τοῦ-plus-infinitive is mainly found in the writings of St. Luke and St. Paul, hardly in the others, often in the LXX, but seldom in the papyri, and from this distribution they conclude that the difference may have been of a social character: the construction probably belonged to a higher level of Koine Greek, which may explain the addition in Luke VIII 5. In the Apc. this construction occurs once and is even independent of a finite verb: XII 7 ὁ τε Μιχαὴλ καὶ οἱ ἄγγελοι αὐτοῦ τοῦ πολεμῆσαι "Michael as well as his angels had to war against" ss. Compare—without τοῦ—XIII 10 (A) εἰ τις ἐν μαχαίρῃ ἀποκτανθῆναι, αὐτὸν ἐν μαχαίρῃ ἀποκτανθῆναι found only in A, but probably original, as it is perfectly in line with the preceding εἰ τις εἰς αἰχμαλωσίαν εἰς αἰχμαλωσίαν ὑπάγει and with Jer. XV 2 ὅσοι εἰς μάχαιραν εἰς μάχαιραν, but the coherence is broken, we think, by κ εἰ τις ἀποκτείνει or by C, 025, 046 εἰ τις ἀποκτενεῖ.

9.II.4.2. *Substantivated Word Groups and Sentences*. With quotations the article may have its anaphorical meaning, *e.g.* in Matt. XIX 18 τὸ οὐ φονεύσεις "the (well known commandment) Thou shalt not kill". St. Luke, however, extends this usage to all indirect questions *e.g.* I 62 τὸ τί ἂν θέλοι καλεῖσθαι αὐτό, and Acts XXII 30 βουλόμενος γινῶναι τὸ ἀσφαλές, τὸ τί κατηγορεῖται. This latter use is probably confined to a higher level of Koine Greek; *cf.* on the other hand Apc. II 7 ἀκουσάτω τί τὸ πν(εῦμ)α λέγει ταῖς ἐπτά ἐκκλησίαις.

9.II.5. *The Use of the Article in the Apc.*

9.II.5.1. *The article is regularly absent from (resp. in):*

a) Titles, inscriptions, lists and the like, *e.g.* in the title [Ἀπο]-
 κάλυψις Ἰ(ησοῦ) Χ(ριστοῦ) (Apc. I 1); an extreme case of this kind

is found in the long address of 1 Peter (I 1-2), where even the name Ἀσίας has no article.

b) Vocatives, *e.g.* Apc. VII 14 κ(ύρι)ε. Nominatives used as vocatives are, however, articular, *e.g.* Apc. IV 11 ὁ κ(ύριος) καὶ ὁ θ(εὸς) ἡμῶν. This construction is frequent in the LXX and the N.T. through the influence of the almost always articular addressee in Hebrew.

c) Proper names followed by an apposition or being appositions themselves *e.g.* Apc. II 13 Ἀντειπᾶς ὁ μάρτυς. Further instances: I 1, 9; II 20 (but A: τῇ); IX 14; XVI 12; XXII 16, 21. In II 14 Α τῷ Βαλὰκ βασιλεῖ the name is articular, but this βασιλεῖ certainly reflects a misreading of the word βάλλειν, which the other *mss.* have in this passage.

9.II.5.2. *The article is incidentally absent from:*

d) Expressions modelled on the Hebrew status constructus which is always anarthrous *e.g.* Apc. VII 4 and XXI 12 υἱῶν Ἰ(σρα)ήλ, but on the other hand II 14 τῶν υἱῶν Ἰ(σρα)ήλ, and perhaps XII 14, XIII 18, XXI 17; the passages quoted by Charles as further instances of this phenomenon need not necessarily be considered as requiring the article *e.g.* XXI 14 καὶ τὸ τεῖχος τῆς πόλεως ἔχων θεμελίους δώδεκα καὶ ἐπ' αὐτῷ[ν] δώδεκα ὀνόματα τῶν δώδεκα [ἀποστόλων] τοῦ ἀρνίου: "and on them twelve names: (namely those) of the twelve Apostles of the Lamb", *cf.* the almost identical XXI 12.¹ A similar translation may be given, in our opinion, of the anarthrous nouns plus genitive in I 20, II 9, VII 2, XV 2. Anarthrous prepositional groups followed by a genitive are listed under *e*).

e) Prepositional groups: I 1 ἐν τάχει, I 10 ἐν πν(εύματ)ι, I 13 *etc.* ἐμ μέσῳ, II 10 ἄχρι θανάτου, II 10 εἰς φυλακὴν, and so: II 22, 23, 26, IV 2, 11 (A only), VI 8, 8, 8, 16, VII 2, 5-8 (12×), 14 (A only), 17, VIII 4, 13, XI 4 (A, 046), XII 2, 11, 14, XIII 3, 8, 10, 10, 10, 10, XIV 11, 13, XVI 12, XVII 8, 8, 11, XVIII 17, XIX 2, 17, XXI 10, 13, 13, 13, 13, XXII 2, 6, 8. According to Mayser this phenomenon may already be perceived in Classical Attic and expanded somewhat in Koine Greek.² As some of these are also followed by a genitive, two rules, *d* and *e*, may have cooperated here (VI 16, VII 2, 5-8, VIII 4, XII 14, XIII 8, XIV 11, XVI 12, XVII 8, XXII 2, 8).

¹ Charles, *o.c.*, I, *pp.* CXX-CXXI.

² *o.c.*, II-2, *pp.* 35-40.

f) Substantives indicating unique persons or things such as ἥλιος, σελήνη, θεός. The Apc. does not furnish any pure examples, because VII 2, XIII 8, XVI 12, XVII 8, XXI 13 and XXII 5 may also be listed sub *e* or *g*, but cf. Matt. XIII 6 ἡλίου δὲ ἀνατείλαντος.

g) Genitives forming a word group with a preceding anarthrous noun: VII 2 ἀπὸ ἀνατολῶν ἡλίου and σφραγῖδα θ(εο)ῦ ζῶντος and so: XIII 8, XIV 7, 11, XVI 12 (A: *lac.*), XVII 8, XXII 2, 17. Some of these have parallels in which both nouns are articular cf. XIV 7 πηγὰς ὑδάτων with XVI 4 τὰς πηγὰς τῶν ὑδάτων, XIV 11 with I 18, and XXII 2 with XXII 19.

h) Genitives of personal names forming a word group with a preceding (articular or anarthrous) substantive. This rule has almost no exceptions in the Apc.: I 1 [Ἀπο]κάλυψις Ἰ(ησο)ῦ X(ρι-στο)ῦ and so I 2, 9, II 13, 14, 14, III 7, V 5, 5, VII 4, 5-8 (12 ×), XII 17, XIV 12, XV 3, XVII 6, XIX 10, 10, XX 4, XXI 12, XXII 16, and in the title or rather subscription Ἀποκάλυψις Ἰωάννου. Only at II 20 (A): τ[ὴν] γυναικᾶ σου τὴν Ἰεζάβελ, but all other *mss.* omit the article.

9.11.5.3. *The Article with Proper Names in the Apc.*

9.11.5.3.1. With personal names the use of the article in general is either wholly in accordance with the rules stated, or not at all, depending on the author's personal taste. St. Mark for instance, observes the rules, but the author of Acts does not. Ἰησοῦς when introduced in Mark I 9 has no article: "there came a (certain) Jesus", and then, from I 14 onwards, the name is always articular or anarthrous according to the rules. Properly speaking the first occurrence of the name is at I 1, but that passage is a title (cf. *par.* 9.11.5.1, rule *a*).

As to the Apc. Charles remarks that the proper names in it lack the article¹ but this is not quite correct. Out of the 41 personal names that have no article 40 instances can be classed under the headings of the preceding paragraphs (9.11.5.1 and 2),² the only instance left being IX 11 ὄνομα ἔχει Ἀπολλύων (see *par.* 9.11.5.3.4).

Moreover, there are in the Apc.-A three instances of personal names which have the article:

¹ *o.c.*, I, p. CXXI.

² In the following paragraphs we shall refer to these headings as "rule *a*", "rule *b*" etc.

II 14 ἐδίδασκεν τῷ Βαλὰκ βασιλεῖ (*mss.* for βασιλεῖ: βαλλειν); this reading of A is undoubtedly incorrect and conflicts, moreover, with rule *a*. The name has in all probability the article because it would otherwise lack a syntagmatical indication, being indeclinable.¹

II 20 τ[ὴν γυ]ναῖκά σου τὴν Ἰεζάβελ. The other *mss.* omit the second article, which seems correct, as it likewise conflicts with rule *a*.

XII 7 ὁ τε Μιχαὴλ καὶ οἱ ἄγγελοι αὐτοῦ. The *mss.* omit τε which may be considered as the postpositive equivalent of καὶ "as well Michael as his angels", or perhaps as constituting one word together with the preceding ὁ: ὅτε "when Michael and his angels". The name has here the article because it is that of a character well known in Apocalyptic literature (*cf.* Jude 9).

Χριστός usually forms a word group with the preceding Ἰησοῦς; this group serves as a proper name and is always anarthrous. Where Χριστός is used alone, at XI 15, XX 4, 6, it has the article and means "the Anointed One"; a comparable word group is κύριος ὁ θεός (I 8, *etc.*, together 9×), but at XVIII 8 A omits κύριος, and inserts the article at XXII 6. At XXI 22 all *mss.* have ὁ γὰρ κ(ύριος) ὁ θ(εός).

The article is always present with Σατανᾶς, even at XII 9, where the name is probably used as a self-indication, just for demonstrating what it is like: ὁ ὄφις ὁ ἀρχαῖος ὁ καλούμενος Διάβολος καὶ ὁ Σατανᾶς, but only so if it is just as Διάβολος connected with καλούμενος. The Hebrew **יָצָן** is never anarthrous, the article indicates that we have to do with "the Opponent". Outside of the Apc., however, there are some instances which lack the article, *e.g.* Mark III 23 πῶς δύναται Σατανᾶς Σατανᾶν ἐκβάλλειν;

9.II.5.3.2. With regard to *Geographical Names* it will be relevant to distinguish between names that may have the article or not, and those of which the article forms an integral part, such as the transposed adjectives ἡ Ἰουδαία, ἡ Γαλιλαία, ἡ Μεσοποταμία (*viz.* γῆ). Nevertheless the article may be absent from the latter under rules *a-h*. The names that may have the article or not either follow the general rule or they do not, *e.g.* Acts IX 3 τῇ Δαμασκῷ and

¹ According to B. Weiss, *Der Gebrauch des Artikels bei den Eigennamen* (*sc.* in the NT), Theol. Studien und Kritiken 86, 1913, p. 349 ss., indeclinable names always have the article when they are the direct or indirect object. (*p.* 368).

IX 38 τῇ 'Ιόππῃ, articular because they are mentioned for the second time, although the first occurrences in IX 2 εἰς Δαμασκὸν and IX 36 ἐν 'Ιόππῃ come under rule *e*, and are therefore ambiguous. However, it is not easy to find instances of place names without a preposition, let alone a first and a second occurrence of the same name without prepositions. Sometimes it seems that in successive names with prepositions rule *e* is not observed, and consequently that the general rule is upheld *e.g.* Acts XIII 6 ἄχρι Πάφου: 13 ἀπὸ τῆς Πάφου, and XIII 13 εἰς Πέργην: 14 ἀπὸ τῆς Πέργης, but neither this usage is consistently carried through, *cf.* XIII 51 εἰς 'Ικόνιον: XIV 1 ἐν 'Ικονίῳ.

Where geographical names do not follow the general rule it is difficult to say—just as for personal names—why a specific name is articular or anarthrous, unless they fall under rules *a-h*. It is possible, as Blass-Debrunner suggest, that we have to do here with undefinable subtleties in the use of language,¹ and we should like to add that the *mss.*, especially in this respect, are far from unanimous, *e.g.* Acts IX 42 καθ' ὅλης τῆς 'Ιόππης, but B, C, P53 omit the article. Names of rivers, however, are seldom anarthrous.

In the Apc. the different kinds of geographical names are treated as follows:

Names of Places. Anarthrous: general rule: I 9, XI 8, XVI 16 (only A: ποταμον); rule *c*: XVII 5, XVIII 10, 21 and also XXI 2 τὴν πόλιν τὴν ἁγίαν 'Ι(ερουσα)λήμ καινὴν ἵδον καταβαίνουσιν, which should be translated “and the holy city, New Jerusalem, I saw. . .”; Βαβυλὼν ἡ μεγάλη in XIV 8, XVI 19, XVIII 2 may come under rule *c*, too; rule *e*: I 11 (7×), II 1, 8, 12, 18, 24, III 1, 4, 7.

Names of Places. Articular: general rule: III 12 (and XXI 10) τῆς καινῆς 'Ι(ερουσα)λήμ, because it is well known to the audience.

Names of Rivers. Anarthrous: rule *c*: IX 14 τῷ ποταμῷ τῷ μεγάλῳ Εὐφράτῃ and XVI 12 (025, 046, **8**; but A, C: τον *etc.*).

Names of Mountains. Anarthrous: XIV 1 τὸ ὄρος Σιών, probably because of rule *c*, but Σιών could be anarthrous contrary to any rule: Psalm XLVII (XLVIII) 13 κυκλώσατε Σιών (after the preceding *v.* 12 τὸ ὄρος Σιών), but *cf.* Psalm L(LI) 20 ἀγάθυνον . . . τὴν Σιών.

Names of Countries. Articular: general rule: I 4 ἐν τῇ 'Ασίᾳ, the three parts of the world being generally known, the articular use

¹ Blass-Debrunner, *o.c.*, *par.* 260.

persisted when Ἀσία was used to indicate the Roman province in Western Asia Minor.

Names of Countries. Anarthrous. XI 8 καλεῖτε (*i.e.* -ται) . . . Αἴγυπτος: the name is introduced in this passage, and moreover seldom articular.

9.II.5.3.3. *Ethnics. Articular.* General Rule: II 6 [τὰ] ἔργα τῶν Νικολαϊτῶν because these works are characteristic of the group as far as known to the addressee. On the same grounds one would also expect the article to be present in II 15 τὴν διδασχὴν Νικολαϊτῶν, where only *ms.* **κ** has it. The distinction which Charles wants to see here between II 16 “*description of a class*” and II 15 “*proper name*” seems hardly tenable.¹ Two solutions seem possible here: a) The teaching by or of Nicolaitans was an incidental activity only and not characteristic of the group; b) the name is anarthrous on the analogy of the preceding II 14 τὴν διδασχὴν Βαλαάμ, in which Βαλαάμ conforms to rule *h*. The latter, in our opinion, is to be preferred, as it is more in line with the presence of the article with διδασχὴν, showing that at any rate the teaching as such is supposed to be familiar to the audience.

In XX 8 τὸν Γῶγ καὶ Μαγῶγ have the article being well known characters in Apocalyptic, although they are appositional to τὰ ἔθνη.

Anarthrous. II 9 (III 9) τῶν λεγόντων Ἰουδαίους εἶναι ἑαυτούς: as these people do of course not pretend to be the group of the Jew(ish Christian)s as far as known to the audience, the article is absent.

VII 5-8: the names of the tribes of Israel are here anarthrous being appositions to φυλῆς (rule *c*, or perhaps *g*). In this passage as well as in XX 8 the border line between peoples and persons is unsharp because these names, Ἰούδα, Μαγῶγ, *etc.*, indicate as well the tribes or peoples, as their eponymous ancestors.

9.II.5.3.4. *The Article with Incomplete Transpositions to the Name Class.* Several of these “names” are “given” in the Apc. as it were for the first time. All the passages to be quoted contain either the substantive ὄνομα or the verbs λέγεσθαι, καλεῖσθαι, which means that the names are used here as self-designations, that is that they are mentioned to inform the hearer-reader what the names of the persons or towns discussed are like. At the same time it is clearly the purpose of the author that the meanings of the

¹ *o.c.*, I, *p.* CXXI-c.

transposed appellatives remain relevant, which is not normally the case with names. (*cf. par.* 8.1). He probably did not mean them to be used outside of the contexts of self-designation, for none of them occurs in a second passage except for Διάβολος (in XII 9).

It is quite in line with the general rules for the use of the article that such names are anarthrous: they are still unknown to the audience. A number of the names are nevertheless exceptions to this rule because the word group transposed as such comprised the article, for instance in XIX 13 ὁ Λόγος τοῦ Θεοῦ.

Anarthrous Instances.

IX 11 ὄνομα αὐτοῦ Ἑβραϊστὶ Ἀβραδδών, καὶ ἐν τῇ Ἑλληνικῇ ὄνομα ἔχει Ἀπολλύων. The Hebrew אַבְרָדְדֹן (Ἀβραδδών), a feminine word which occurs 5× in the Masorah, is rendered 4× in the LXX by ἀπώλεια, and once by ἀπώλεσεν. These translations may have influenced the choice of Ἀπολλύων, a masc. participle, because a man's name was required. However, a number of five identical renderings is too low a figure for drawing any conclusions. Ἀπολλύων may as well have been chosen instead of other words (*e.g.* Ὀλεθρος) because of its likeness to Ἀπόλλων, who is also connected with ὀλλύνειν in Archilochus *frg.* 30 (Diehl) Ἀπολλων . . . ὄλλυ ὄσπερ ὀλλύεις.

XIX 11 (κ) καὶ ὁ καθήμενος ἐπ' αὐτὸν Πιστὸς καλούμενος καὶ Ἀληθινός (A, 025 omit καλούμενος).

XIX 16 Βασιλεὺς Βασιλέων καὶ Κυρίου Κυρίων, a combination which according to Charles is found first as a title of God in 1 Enoch IX 4 (ὁ) κύριος τῶν κυρίων καὶ ὁ βασιλεὺς τῶν βασιλευόντων. In our passage it has no article as it is also an inscription (rule *a*). The phrase recurs in XVII 14 but is there not used as a name.

Ambiguous is XII 9 ὁ ὄφις ὁ ἀρχαῖος, ὁ καλούμενος Διάβολος καὶ ὁ Σατανᾶς. The name Διάβολος which is of course not coined here for the first time, is the only self-designation that occurs elsewhere in the book, even in a preceding passage (II 10), and nearly always with the article just as in the LXX. Apparently this does not prevent the author from using it here quasi for the first time in order to reveal the identity of the snake who had thusfar been anonymous. It is hard to tell whether the article before καλούμενος is also to be connected with Διάβολος because two analyses are possible:

a) "the so-called Devil and the Satan"; b) "the one who is called "Devil" and "the Satan" *cf.* Luke VI 15 Σίμωνα τὸν καλού-

μενον Ζηλωτήν. A similar expression is found in Apc. XX 2 τὸν δράκοντα, ὁ ὄφις ὁ ἀρχαῖος, ὅς ἐστιν Διάβολος καὶ ὁ Σατανᾶς, which may indicate that Διάβολος is to be seen as anarthrous at XII 9.

Articular Instances.

VI 8 mss. ὄνομα αὐτοῦ ὁ Θάνατος (A: ο αθανατος, **κ** and C omit the article)

VIII 11 τὸ ὄνομα τοῦ ἀ[στέ]ρος λέγεται ὁ ᾿Αψινθος (**κ*** omits the article)

XVII 5 Βαβυλὼν ἡ μεγάλη, ἡ M(ήτ)ηρ τῶν πορνῶν καὶ τῶν βδελυγμάτων τῆς γῆς

XIX 13 κέκληται τὸ ὄνομα αὐτοῦ ὁ Λόγος τοῦ Θεοῦ.

In VI 8 and XIX 13 ὁ Θάνατος and ὁ Λόγος are articular, as they were transposed with the article present. In XVII 5 ἡ M(ήτ)ηρ τῶν πορνῶν the article should probably bring out that the author pretends that this name (or rather fact) is already well known in spite of the fact that he mentions it now for the first time and in the form of an inscription. The article of ὁ ᾿Αψινθος in VIII 11 is difficult to explain; we have no idea why the word is articular, but it is just possible that “wormwood” was one of the current notions in the Apocalyptic literature now lost to us. The feminine gender of the substantive ἡ ᾿αψινθος has been changed, probably because it had to serve as the name of a star: the word ἀστήρ is masculine.

9.11.6. *Oppositions between Indefinite Pronoun, Interrogative Pronoun, Definite Article and 3rd Person Pronoun.*

The mutual oppositions of all the pronouns of which the meanings somehow imply the addressee’s knowledge about the persons or things referred to, may now be schematized as follows:

<i>unmarked</i>		<i>marked</i>
known or unknown to addressee		known to addressee
no information expected τις (with εἰς II: “a”)	information expected τίς	unemphatic: ὁ, ἡ, τὸ (attributive) αὐτον (independent) emphatic: αὐτός
ποιός, etc.	ποῖος, etc.	

9.12. *The System of the Correlative Adverbs and Adjectives*

9.12.1. *Introduction.* In the above paragraphs the different correlatives have been mentioned in connection with the various

pronouns as far as they are attested in non-literary Koine Greek, but their system could not be shown in this way. Moreover, the sets shown were either incomplete or suppletive, as none of the pronouns has a complete set of correlative adverbs built on the same basis as the pronoun itself.

Three kinds of adverbs have become obsolete or are used by Atticizing authors only: *ποῦ* "whither", *πῇ* "by what way?", and *πόθι* "at what place?", and so *ὅποι*, *etc.*, *etc.*, but *πανταχῇ* and *πάντῃ* are still found in the N.T. (Acts XXI 28 and XXIV 3).

9.12.2. *Correlative Adverbs.*

9.12.2.1. *Forms.*

- (1) -ου "in, at" or "to" (local)
- (2) -θεν "at", "from", "to" (local, temporal)
- (3) -σε "to" (local)
- (4) -τε "in, at" (temporal)
- (5) -(ην)ίκα "in, at" (temporal)
- (6) -(ω)ς syntactical valence (*cf. par. 7.2.3*)

9.12.2.2. *Values.* In the Hellenistic period the value of the words in 1) -ου implies both being in, and movement to. Likewise, the value of the words in 2) -θεν is "in, at" as well as "from", and even "towards" *e.g.* Apc. XI 2 ἐκβαλε ἔξωθεν; moreover, it is not only local as 1) -ου and 3) -σε, but also temporal; 4) -τε and 5) -(ην)ίκα are exclusively temporal. Besides there may be aspects of meaning that are neither local nor temporal *e.g.* ὅπου 1 Cor. III 3 "as far as" (*Vulgate: cum*).

9.12.2.3. *Productivity.* The sketched system, which as a whole was a closed system, formed part of the greater systems of the pronouns and the numerals. Of the constituent configurations only *nr. 6*) -(ω)ς had a productive counterpart, namely in the adjective system: δίκαιος-δικαίως, σώφρων-σωφρόνως (*par. 7.1*). *Nr. 2* the adverbs ending in -θεν have expanded somewhat by a number of transpositions, which according to Kretschmer-Locker amounted to some 315 words. Of these *c. 27%* are transpositions from the substantive class; in the N.T. occur οὐρανόθεν (*e.g.* Acts XIV 17), παιδιόθεν (Mark IX 21), κυκλόθεν (Apc. IV 3 and 8); their accent is penult when they are transposed from types ἄγγελος—δρέπανον and φύλαξ—ῥήτωρ (*e.g.* παιδόθεν), but compare on the other hand the accent of θύραθεν (from θύρα);

c. 25% have been transposed from geographical names, and are absent from the N.T.;

c. 22% belong to the systems of pronouns or numerals; c. 20% are formed on the basis of other adverbs or prepositions e.g. ἄνω—ἄνωθεν, ἔκτος—ἐκτοσθεν;

c. 6% are transpositions from the adjective class; only one occurs in the N.T.: μακρόθεν (14×, of which 3× in the Apc.: XVIII 10, 15, 17). The accent is always penult cf. ἔγγυς—ἐγγύθεν.

9.12.2.4. *Further Deictic Adverbs.* There remains a small group of adverbs, those of “day” and “year”, which are formally not reminiscent of any pronoun, but whose lexical meanings cannot be defined without having recourse to the meaning of οὗτος or νῦν. They are therefore to be reckoned with the deictic words.

	<i>adverbs</i>	<i>corresponding adjectives</i>
<i>day</i>	πρόθεν or προχθές (IV A.D.) “the day before yesterday” χθές “yesterday” σήμερον (Atticistic τήμερον) “to-day” αὔριον “to-morrow”	προχθесινός χθесινός σημερινός αὔρινός
<i>year</i>	προπέρυσι “two years ago” πέρυσι “last year” σᾶτες (Atticistic τῆτες) “this year”	{ προπερυσινός, προπερυσινός [-sinós] περυσινός σατινός, σητάν(ε)ιος (Atticistic τητινός)

From the formal point of view the pairs ἡμέρα-τήμερον and ἔτος-τῆτες seem paralleled by ὅτε-τότε, but the past/future value of τότε is not comparable.¹ The lexical meaning of σήμερον or σᾶτες may be paraphrased as “the day/year in which the speech act takes place”. The remaining words indicate days and years reckoned from σήμερον and σᾶτες.

¹ The new *Supplement to Liddell-Scott-Jones' Greek-English Lexicon*, compiled by E. A. Barber (Oxford 1968) has as a new entry the word τῶρα “now”. This word is supposed to have a relation to ὥρα which is considered to be proportional to that between τήμερον and ἡμέρα. The only source is an inscription found at Doumeir (near Damascus) dated 216 A.D. (published: Syria XXIII, 1942-43, p. 179), but in the edition the word is spelled τῶρα. We prefer to consider this with the editors as a crasis, but of τῇ and ὥρα (cf. Schwyzler, *o.c.*, I, p. 622). The initial τ- instead of θ- lines up with the fact that [h-] had disappeared from pronunciation. Since τῆτες and τήμερον were Atticistic as against σᾶτες, σήμερον, such a hyper-Atticistic innovation as τῶρα would probably have been discarded forthwith as non-occurrent in the Classical literature and therefore as un-Attic. For τῆτες and τήμερον see Moeris p. 210 (Bekker) and Thomas Magister 348, 1.

9.12.2.5. *Survey of the Correlative Adverbs.*

ὁ αὐτός	ἄλλος	ἕτερος	ὃς	ὅστις	οὗτος	ἐκεῖνος
ὡσαύτως	ἄλλως	ἐτέρως	ὡς	ὅπως	οὕτως	ἐκείνως
ὁμοῦ	ἄλλαχού	.....	οὗ	ὅπου	ὥδε	ἐκεῖ
.....	ἄλλαχόθεν	ἐτέρωθεν	ὅθεν	.....	ἐντεῦθεν	ἐκεῖθεν
ὁμόσε	.....	.....	.....	.....	ἐνθάδε	ἐκεῖσε
.....	ἄλλαχότε	.....	ὅτε	ὅποτε	νῦν	τότε
.....	.....	.....	ἡνίκα	ὁπηνίκα	.....	.....

τις	οὐδεῖς, μηδεῖς	αὐτός
πως	οὐ-, μηδαμῶς	αὐτως
που	οὐ-, μηδαμοῦ	αὐτοῦ
ποθέν	οὐ-, μηδαμόθεν	αὐτόθεν
....	οὐ-, μηδαμόσε	αὐτόσε
ποτέ	.....	.....
....	.....	αὐτίκα

9.12.3. *Correlative Adjectives.*

Their system comprises four configurations.

- (1) adjectives in -οῖος: "of . . . kind"
- (2) adjectives in -όσος: "of . . . size"
- (3) adjectives in -ηλίκος: "of . . . size or age"
- (4) adjectives in -(ο)δαπός: "from . . . country, of . . . kind".

	-οῖος	-όσος	-ηλίκος	-(ο)δαπός
ἡμεῖς	—	—	—	ἡμεδαπός
ὑμεῖς	—	—	—	ὑμεδαπός
ὁ αὐτός	{ ὅμοιος ταυτοῖος (VI AD)	—	—	—
ἄλλος	ἄλλοῖος	—	—	ἄλλοδαπός
ἕτερος	ἐτεροῖος	—	—	—
ὃς	οἶος	ὅσος	ἡλίκος	—
ὅστις	ὅποῖος	ὅπόσος	ὅπηλίκος	(ὅποδαπός)
οὗτος	τοιούτος	τοσοῦτος	τηλικούτος	—
τις	ποιός	ποσός	{ πηλίκος	—
τίς	ποιῖος	πόσος	—	ποδαπός
πάντες	παντοῖος	—	—	παντοδαπός

Remarks. Of all these words only ἄλλοῖος and ὅμοιος take part in the categories of comparison, ἄλλοῖος, ὅμοιος and ποσός in the category of the adjectival adverb: ἄλλοίως, ὁμοίως, ποσῶς; rare or late are ποίως, οἷως, τοιούτως, ποδαπῶς.

Hatch-Redpath's Concordance to the Septuagint mentions Αἰγυπτοῖος at Isaiah XIX 5 (⌘), but this reading is an orthographical variant of Αἰγύπτιος "Egyptian", and not a transposition from the geographical name Αἴγυπτος with the meaning "of Egyptian *kind*".

The plurals of the adjectives in -όσος may be reckoned to belong to the indefinite numerals, both on account of their lexical meanings and of the fact that they have corresponding ordinals and multiplicatives: πόσοι—ποσάκις—πόστος "which in the series?"—ποσταῖος "on which day in the series?".

The adjective ποδαπός has a variant form ποταπός; the adjective όποδαπός does not occur in Koine Greek. Transpositions from the class of adverbs are: τηλεδαπός (adv. τῆλε) and έχθοδαπός *i.e.* έκτοδαπός (adv. έκτός).

9.12.4. Survey of the Pronouns with Correlated Adverbs.

1. Relations with the Space or Time of the Participants or with the Use of Language as such.				2. Assumptions of the Speaker with regard to the Knowledge of the Addressee.											
marked(?)				unmarked											
rel. with use of language				known or unknown to addressee											
not necessarily with same or preceding sentence	with same or preceding sentence			space/time of part. or use of l.		space/time of non-part. or use of l. distant in time		no information expected		information expected		unemphatic		emphatic	
	det.	dist.													
pr.	ὁ αὐτός	ἄλλος	ἕτερος	ὃς ὅστις	οὗτος	ἐκεῖνος		τίς	που	τίς	ποῦ	αὐτόν δ	—	αὐτός	
adv.	ὁμοῦ	ἀλλοχού		οὗ ὅπου	ὧδε	ἐκεῖ		που	ποῦ	—	—	—	—	αὐτοῦ	
adj.	ὅμοιος	ἀλλοῖος	ἐτεροῖος	ἀλλοδαπός	ὅλος, ὁποῖος ὅσος, ὁπόσος ἥλικος, ὁπηλικος	—		ποῖός ποσός τηλικός	ποῖος πόσος τηλικός ποδαπός	—	—	—	—	—	

CHAPTER TEN

THE NUMERAL SYSTEM

10.1. *Introduction*

Up to now it has been customary to include in grammars of the Classical languages a chapter on "Numerals" which demonstrates how to count in the specific language. Any demonstration of this kind is in some way or other a list of the spoken equivalents of the successive elements of the arithmetical order. However, and this point should be stressed, there is no reason to believe that the arithmetical order is identical with the *morphological* system in which the numerical words of a language *may* be configured. Moreover, such lists of the spoken equivalents of numbers are from the linguistic point of view nearly always collections of heterogeneous elements: they may comprise non-composite words, compounds and word groups.

Uhlenbeck has shown this in his study on the numerals of Modern Javanese, pointing out *a.o.* that the numerals for "one" and "ten", *siji* and *sěpuluh*, belong to a morphological configuration which is different from the one in which the words for "two" to "nine" take part.¹ This division conflicts altogether with the fixed arithmetical series of "one, two, *etc.*, . . . ten". A comparable instance from Koine Greek: *εἷς* and *δέκα* are morphologically different from the intervening *τρεῖς* to *έννέα* in that they cannot take part in the configurations of *-ά/ήκοντα* and *-κόσιοι*.

If the arithmetical order is nevertheless applied in language teaching it serves a practical end, to be compared to the purpose of those pages in our idiom books which list words or expressions for parts of the body, names of trees, car accessories, *etc.* This procedure, though justified from a didactical point of view, is not in place once we want to describe the *morphological* structure of a numeral system, based as it is on a criterion that is usually alien to the system at issue.

These critical remarks do not imply that we want to deny that the linguistic arrangement of numerals may be influenced by the arithmetical order. This influence, however, is—as far as we know—

¹ E. M. Uhlenbeck, *De Systematiek der Javaanse Telwoorden* (i.e. The Systematics of the Numerals in Javanese), Bijdr. Kon. Inst. Taal-, Land- en Volkenkunde 109, 1953, p. 342 ss.

restricted to change of form on the analogy of the arithmetically preceding or following numeral, as our instances may show.

In the Elean dialect of Greek $\delta\kappa\tau\acute{\omega}$ became $\delta\pi\tau\acute{\omega}$, with π taken over from the preceding $\acute{\epsilon}\pi\tau\acute{\alpha}$. In the Balto-Slavonic languages the words for "nine" have given up their former initial *n*- and have adopted *d*- from the words for "ten" *e.g.* Russian *d'ev'at'* "nine" — *d'es'at'* "ten"; the only exception is in Old-Prussian *newints* "nine". In the same way we think that Latin *quinque* < *penk^we owes its initial *qu*- to the preceding *quattuor*.¹ A parallel to this type of change is offered by the alphabetical order. In Greek the name of the letter $\zeta\eta\tau\alpha$ was formally influenced by the preceding $\eta\tau\alpha$ and $\theta\eta\tau\alpha$; originally it must have had an [-*n*-] and may have been something like * $\zeta\eta\nu\alpha$ *cf.* Hebr. *zayin*.

Influence of the arithmetical order is also to be observed in the hierarchical sequence of the elements constituting compound numerals or numeral word groups *e.g.* $\acute{\epsilon}\kappa\alpha\tau\acute{\omicron}\nu\ \tau\epsilon\sigma\sigma\epsilon\rho\acute{\alpha}\chi\omicron\nu\tau\alpha\ \tau\acute{\epsilon}\sigma\sigma\alpha\rho\epsilon\varsigma$, *centrum quadraginta quattuor*.

The decimal character of the current Arabic or rather Hindu-Arabic system of *figures* seems to line up somewhat more with the structure of the numeral systems of some of the Semitic and Indo-European languages. The structure of the figures "3-30", "4-40", *etc.*, and the Arabic and Sanskrit numeral pairs for "three-thirty", "four-forty", *etc.*, run parallel to some extent, but in none of these languages the configuration of the decads comprises more than eight of such pairs. In the system of figures on the other hand decimality is carried through consistently: it depends on the place of a figure in a series whether its value should be multiplied by 10, by 10×10 , by $10 \times 10 \times 10$, *etc.* There is, however, no Semitic or Indo-European numeral like "one-ty" to match "10", or like "six-ty-ty" to match "600". On the contrary, instances are not lacking that originally transparent configurations have been given up. The idg. *dekmt "ten"—*dwi-dkmti "two tens, twenty"—*tria-dkomta "three tens" have developed into the dissimilar $\delta\acute{\epsilon}\kappa\alpha$ — $\epsilon\acute{\iota}\chi\omicron\sigma\iota$ — $\tau\rho\acute{\iota}\alpha\chi\omicron\nu\tau\alpha$ or *dix*—*vingt*—*cent*. Likewise $\tau\acute{\epsilon}\sigma\sigma\alpha\rho\epsilon\varsigma$ — $\tau\epsilon\sigma\sigma\epsilon\rho\acute{\alpha}\chi\omicron\nu\tau\alpha$ have become in Modern Greek $\tau\acute{\epsilon}\sigma\sigma\epsilon\rho\epsilon\iota\varsigma$ [téséris] - $\sigma\alpha\rho\acute{\alpha}\nu\tau\alpha$ [saránda], a pair which does not run parallel to $\tau\rho\acute{\epsilon}\zeta$ [tris] - $\tau\rho\acute{\iota}\alpha\acute{\nu}\tau\alpha$ [triánda] or

¹ According to T. G. Tucker, *A Concise Etymological Dictionary of Latin*, Halle/S, 1931 *s.v.* *quinque* the form with initial *qu*- has arisen from *pinque "by assimilation" (same explanation in A. Ernout, *Morphologie historique du latin*, Paris, 1953, p. 108). Walde-Hofmann's etymological dictionary does not comment on the initial *qu*-.

πέντε [péndɛ] - πενήντα [penínda], unless we should want to see a connection still between *σαράντα* and the middle syllable of the genitive *τεσσάρων*. Cf. also the Latin system: *septem*—*septuaginta*, *octo*—*octoginta*, *novem*—*nonaginta*, with the Modern French equivalents: *sept*—*soixante-dix*, *huit*—*quatre-vingts*, *neuf*—*quatre-vingt-dix*, which show quite a different arrangement.¹ The care to preserve what was transparent in the numeral system does not seem to have been very great, or to have counteracted linguistic change.

10.2. *Oppositions and Division.*

The number of oppositions found in the numeral system of Koine-Greek amounts to 15. These oppositions are:

- | | |
|---------------------------------|--|
| (1) basic series | (10) place where: -χοῦ |
| (2) decads: -ά/ήκο(ντα) | (11) place from where: -χόθεν |
| (3) hundreds: -κόσι(οι) | (12) distribution: δύο-δύο (re-duplicative) |
| (4) order: -τος/-στός | (13) addition: ἔνδεκα (compositional) |
| (5) . .-fold: -πλοῦς | (14) multiplication: δισχίλιοι (compositional) |
| (6) . .-times as many: -πλάσιον | (15) neuter value: cardinals |
| (7) . .-times: -κις | |
| (8) manner: -χῶς | |
| (9) manner: -χῆ | |

According to their participation of these oppositions the basic cardinals can be divided into those that take part in oppositions 2 and 3, and those that do not. The latter can be subdivided into non-compounds and compounds; the compounds, do not take part in oppositions 9, 10, 11, 12. As possible compositional elements the non-compound numerals are subject to specific rules of combinability, which to some extent run across the division just made, but which can still be formulated in terms of this division. We shall divide then the numerals into five groups, and show the order in which we shall discuss them:

- group 1: non-compounds taking part in the oppositions of decads and hundreds;
- group 2: non-compounds not taking part in these oppositions;
- group 3: multiplicative compounds;
- group 4: additive compounds;
- group 5: additive formations, which may be compounds or word groups.

¹ These multiplications of "twenty" may have been taken over from Celtic cf. F. Gourvil, *Langue et littérature bretonnes*, Paris, 1952, p. 15.

Form Description.

Cardinals. The numerals of the basic series have no common characteristic of form. Only three of them take part in the oppositions of case and gender namely δύο (case only), τρεῖς, τέσσαρες. In the series of the decadic numerals -άκοντα and -ήκοντα vary: the former is preceded by the phonemes /i/ or /r/, the latter by consonant phonemes or by /o/ (in ὀγδοήκοντα). The decad corresponding to δύο is quite irregular: εἴκοσι; the one corresponding to τέσσαρες: τεσσαράκοντα, has a free variant τεσσεράκοντα, which occurs in the Apc. ms. A in: XI 2, XIII 5, XIV 1, 3 and XXI 17, whereas τεσσαράκοντα occurs only in VII 4. In the series of the hundreds there are special bases ending in -α which are also found in all sorts of compositions like τετράμορφος etc. A curious transposition to this series is ψάμμος "sand" —ψαμμακόσιοι "sand-hundred, as many hundreds as sands".

Ordinals. Basic series: shortened basis plus -τος, except ἑβδομος, ὀγδοος which have -ος (for their basis cf. ἑβδομήκοντα, ὀγδοήκοντα).¹ There is no comparable ordinal to δύο: δεύτερος is the usual suppletion, which like *secundus* originally meant "following" (cf. the epic verb δεύεσθαι); it may, however, be that δευ -was later felt as some variant form of δύο.² The form δυοστός to which εικοστός etc. can be compared, is a late and ephemeral formation found in Schol. Eurip. *Hec.* 32.

The decadic ordinals can be described as: cardinal in -ά/ήκοντα minus -ντα and plus -στός, -στή, -στόν; the ordinal hundreds as: cardinal in -κόσιοι minus -οι and plus -οστός, -οστή, -οστόν.

Series in -πλοῦς, -πλασίων, -κισ, -χῶς, -χῆ, -χόθεν, -χοῦ are for-

¹ Ἑβδομ- is merely a form variant of ἑπτά and not a specially ordinal form; it occurs also in ἑβδομήκοντα, and is a declined *cardinal* in Aeschylus, Septem 125 πύλαις ἑβδόμαις; see F. Sommer, *Zum Zahlwort*, Sitz. Ber. Bayerischen Ak. Wiss., *Phil.-hist.Kl.* 1950, *Heft* 7, Munich, 1951, p. 7.

² In many languages the numerals for "one" and "two" hold a special place. The corresponding ordinals "first" and "second" are usually built on stems different from those of the cardinals, and show some formal correspondence with the word for "last", and with the word for "following, coming after" or the like. "Two" is an important number: thinking in and counting by pairs is spread all over the world. The pair as a combination of complementary or symmetrical units may have been suggested by the parts of the body. Consequently "one" may often be seen rather as "the half of two" than as the basic unit in counting: *sems (εἷς) is etymologically related to *sēmi- (ἡμι-). See J. Gonda, *Observations on Ordinal Numbers*, in: *Binghisan Budi, Feestbundel Ph. S. v. Ronkel*, Leyden, 1950, pp. 135-138, and *Reflections on the Numerals "One" and "Two" in ancient Indo-European Languages*, Utrecht 1953, pp. 28-48 (especially p. 41).

mations on the same bases as found in the cardinal hundreds, except that we have here δι- and τρι- instead of δια-, τρια-, and ἐννεα- by the side of ἑνα-. In the series of -κίς we find -ς in δίδς, τρίς instead of -κίς: the "regular" δυάκίς and τριάκίς are used only by Aristophanes *frg.* 769, and no doubt serve a comic purpose.

10.3.1.2. *Non-Compounds not taking part in Decads and Hundreds.*

<i>basic (cardinal)</i>	<i>ordinal</i>	-πλοῦς	-πλασίων	-κίς	-χῶς etc.	reduplic.
εἷς	πρῶτος	ἄπλοῦς	—	ἄπαξ	—	εἷς-εἷς
δέκα	δέκατος	δεκαπλοῦς	δεκαπλ.	δεκάκίς	δεκαχῆ	—
ἑκατόν	ἑκατοστός	—	ἑκατονταπλ.	ἑκατοντάκίς	—	—
χίλιοι	χιλιοστός	—	χιλιοπλ.	χιλιάκίς	—	—
μύριοι	μυριοστός	—	μυριοπλ.	μυριάκίς	μυριαχοῦ	—

Remarks. The position of εἷς in the morphological system of the numerals is curious. Besides the reduplicative εἷς—εἷς there are no formations on the same basis: *cf.* πρῶτος, ἄπλοῦς, ἄπαξ. In compound numerals and in word groups it plays, however, the same rôle as the other numerals: ἑνδεκα, εἴκοσι-εἷς, *etc.*

According to Herodian μύριοι is "10.000", but μυρίοι "innumerable". The ordinal has an incidental variant μυριαστός, which is probably based on the transposition μυριάς, or otherwise to be explained as dissimilation of the two o-vowels in μυριοστός. In χιλιάκίς, μυριαχοῦ the α-vowel is found as in *e.g.* δεκάκίς, but in the multiplicatives we find -ο-: χιλιοπλασίων, μυριοπλασίων (μυριονταπλασίων only in Sch. Pappus. 1182, 4).

Transpositions. They differ from the other numerals of this group by the fact that they do not occur as elements of word groups like δισχίλιοι-ἑκατόν-δύο; with the exception of πολλοί they are all correlative adjectives of pronouns:

basic	ordinal	-πλοῦς	-τλασίων	-κίς	-χῶς	-χῆ	-χόθεν	-χοῦ
πόσοι ποσοί ῥσοι ῥποσοι τοσοῦτοι πολλοί	πόστος ποστός — δπόστος — πολλοστός	ποσαπλοῦς — — — — πολλαπλοῦς	— — — δποσαπλασίων τοσαυταπλασίων πολλαπλασίων	ποσάκίς ποσάκίς δσάκίς δποσάκίς τοσαυτάκίς πολλάκίς	ποσαχῶς — δσαχῶς δποσαχῶς τοσαυταχῶς πολλαχῶς	— — δσαχῆ δποσαχῆ — —	— — — — — πολλαχόθεν	— — δσαχοῦ δποσαχοῦ — πολλαχοῦ

certain that they have arisen from word groups such as the one found in Hesiod, *Works* 252 τρίς γὰρ μύριοι εἰσιν (*cf.* M. Aur. II 14, 1 τρισχίλια ἔτη . . . καὶ τοσαντάκις μύρια). The only formation which contains an adverb in -κις from group 2 is: μυριακισμυριοστός (Archimedes, *Aren*, 3, 3), which also happens to be the only compound ordinal in -μυριοστός.

In the LXX and the N.T. these compounds suffered the keen competition of word groups consisting of a cardinal and the transpositions χιλιάδες, μυριάδες. In the Apc. such word groups are used exclusively, just as in Modern Greek where even δέκα χιλιάδες has replaced μύριοι. An intermediary type seems to be present in 1 Macc. IX 4 *ms.* A δισχιλιάσιν (dative case) and in Apc. IX 16 *ms.* A δισμυριάδες, which will be discussed in *par.* 10. 7.

10.3.2.2. *Additive Compounds.* The only additive formations that are undoubtedly compounds are ἑνδεκα and δώδεκα and their derivatives¹. They combine ἐν-[εν-] the basis of εἷς (gen. ἐνός), and δω—a variant of δύο, with -δεκα. This minor configuration is as follows:

<i>cardinal</i>	<i>ordinal</i>	-πλασίων	-κις	-χῶς
ἑνδεκα δώδεκα	ἐνδέκατος δωδέκατος	δωδεκαπλ.	ἐνδεκάκις δωδεκάκις	ἐνδεκαχῶς δωδεκαχῶς

10.3.2.3. *Additive Compounds or Word Groups.* These formations consist of: cardinal plus cardinal, ordinal plus ordinal, cardinal plus ordinal, cardinal plus -πλασίων word, and cardinal plus -κις word. It is difficult to decide whether they are compounds or word groups. The latter it seems more safe to assume because the accentuation was not fixed. About such a formation as τρεῖσκαίδεκατος the grammarian Herodian can say: τινὲς δὲ καὶ κατὰ παράθεσιν, ὡς τὸ τρεῖς καὶ δέκατος.² Moreover, the order could be reversed, sometimes by one and the same author: compare Apc. VII 4 ἑκατὸν τεσσαράκοντα δ̄ with XXI 17 δ̄ καὶ ἑκατὸν τεσσαράκοντα (ⲕ: εκατον μδ', 046: ρμδ'), which, however, may be an inaccurate correction (but *cf.* 2 Macc. I 7 with XIII 1, *cf. par.* 10.3.2.3.3).

¹ In Thucydides V 20 a compound with -δεκα is found which does not have an additive value: αὐτόδεκα ἔτων διελθόντων 'just ten years'; the same holds good of πολλοδεκάκις 'many tens of times' in Aristophanes, *Pax* 243.

² *Ed.* A. Lentz, II, Leipsic, 1868, *p.* 97, *lines* 11-12.

The components of the word groups, as we shall call them now, could not follow upon one another in any conceivable sequence or combination. As to combination one easily distinguishes five groups; the members of each may be combined with members of other groups, but not with members of their own group. These groups are:

gr. 1: μύριοι and compounds δισμύριοι, *etc.*

gr. 2: χίλιοι and compounds δισχίλιοι, *etc.*

gr. 3: ἑκατὸν, διακόσιοι *etc.*

gr. 4: δέκα, εἴκοσι, τριάκοντα, *etc.*

gr. 5: εἷς, δύο, *etc.*, ἑννέα.

The cardinals in this list may be replaced by: ordinals, words in -πλασίων, and words in -κις. A seeming exception to our list is δευτεροπρωτος in Luke VI 1 (A, C, D), because two members of the same group 5 are here combined, but as its meaning is in all probability "the second counted from the beginning", it is not additive in value, and does therefore not belong to these groups at all, neither does its counterpart δευτερέσχατος "the second from the end, the last but one".

As to the sequence: the members of the above five groups are combined in such a way that the arithmetical order is observed either in descending or in increasing progression *e.g.* ἑκατὸν—δέκα—πέντε, δευτέρου καὶ πεντηκοστοῦ κ. ἑκατοστοῦ. This rule is hardly ever broken. An instance like 2 Macc. XIV 4 πρώτῳ καὶ ἑκατοστῷ καὶ πεντηκοστῷ (Editio Sixtina 1587) is a rare exception, and probably due to a corrective insertion of πρώτῳ in the wrong place.

10.3.2.3.1. *Cardinal plus Cardinal.* In these word groups the descending order is usually observed in the Hellenistic period: δέκα-τρεῖς, εἴκοσι-πέντε, τριάκοντα-δύο, *etc.*; even δέκα-εἷς and δέκα-δύο tended to replace ἑνδεκα and δώδεκα. The latter two as well as τρεισκαίδεκα up to ἑννεακαίδεκα were used in the Ptolemaic period in the more official documents, whereas δέκα-εἷς *etc.* belonged to the more colloquial language. In the N.T. a compromise has been reached: ἑνδεκα and δώδεκα are used, but further, δέκα-τρεῖς *etc.* Only in the Book of Acts δέκα-δύο occurs twice: in the 9th century uncials H, L, P, S at XIX 7 and XXIV 11, by the side of δώδεκα at VI 2 and VII 8 in all *mss.*; there is not a trace of formations like τρεισκαίδεκα in the N.T. In the occurring groups καὶ is seldom inserted, in the Apc. in XI 2 and XIII 5 (*ms.* A) τεσσεράκοντα καὶ δύο and XXI 17

δ̄ καὶ ἑκατὸν-τεσσεράκοντα (cf. Luke XIII, 16; John II 20, V 5; Acts XIII 20, Gal. III 17).

10.3.2.3.2. *Cardinal plus Ordinal* (with ordinal value of the whole group). In these groups it is always the cardinal which has of the different words the lowest numerical value (exception: δεκαέννατος in Joann. Lyd. *Ost* 18). The ordinal word groups for "13th . . . 19th" are in the Hellenistic period generally of the type of τρεῖς καὶ δέκατος, with increasing order. Instead of τέσσαρες καὶ one may sometimes find τέσσαρα καὶ e.g. P. Erz. Rain. II 4 (129 A.D.); ἐξ καὶ—is usually replaced by ἕκ καὶ—: cf. the use of the preposition ἕκ before consonants instead of ἐξ; instances without καὶ are rare e.g. Luke III 1 (ms. L) πεντεδεκάτῳ. The elements τρεῖς and τέσσαρες are not declined: τρεῖς καὶ δεκάτου, but εἷς is declined in word groups with εἰκοστός etc.: τεσσερακοστῷ καὶ ἐνὶ, etc.¹ The older type τρίτος καὶ δέκατος is not found in the N.T. and in the Ptolemaic papyri, but it does occur three times in the LXX: Esther IX 21 (ms. S²) πέμπτην καὶ δεκάτην, and in 2 Macc. XI 33 (V) and 38 (Sixtina).

As to the remaining word groups it is difficult to say whether the same type prevailed. In the LXX it certainly did not: there we find word groups consisting of ordinals only, except for the fact that those with πρῶτος and εἷς occurred side by side: 3 Kings XVI 23 τριακοστῷ καὶ πρώτῳ and 1 Macc. VII 1 ἐνὸς καὶ πεντηκοστοῦ καὶ ἑκατοστοῦ. The same holds good of the Ptolemaic papyri (but in them πρῶτος καὶ . . . does not occur). As to the N.T. nothing can be said because there are no compound ordinals with a numerical value higher than "fifteenth".

Peculiarities: An instance without καὶ is δύο τριακοστόν (P. Ryl. II, 157, 8; II A.D.) Instead of τέσσαρες καὶ . . . one may find τετρακαι- e.g. τετρακαιεικοστόν (W. Ostr. 730, 3; ca. 150 B.C.). The instances given above mainly show the increasing progression, but the reverse is also found e.g. 2 Chr. XVI 13 (ms. A) τεσσερακοστῷ καὶ ἐνὶ and Jer. LII 1 εἰκοστοῦ καὶ ἐνὸς.

10.3.2.3.3. *Ordinal plus Ordinal*. It has been remarked above, that as contrasted with the combinations consisting of a basic ordinal and εἰκοστός, τριακοστός, etc., word groups consisting of basic ordinal plus δέκατος do not occur any longer. In the former the constituent elements may be grouped in two different orders.

¹ The indeclinability of τρεῖς- and τέσσαρες-, as well as the fact that the elements in τρεῖςκαίδεκα cannot be reversed may indicate that these constructions should also be considered as compounds.

Compare the *descending* order in 2 Macc I 7 ἑκατοστοῦ ἑξηκοστοῦ ἑνάτου, and (with καί) 2 Macc. I 10 ἑκατοστοῦ ὀγδοηκοστοῦ καί ὀγδού, with the *increasing* order in 2 Macc. XIII 1 ἑνάτῳ καί τεσσαρακοστῷ κ. ἑκατοστῷ.

A quite different system was used by later mathematicians as Ptolemy and Nicomachus of Gerasa, and also by Plutarch: εἰκοστόπεμπτος "25th" and ἑκατοστοεικοστόγδοος "128th". These formations, which are clearly compounds of two ordinal stems, did not belong to colloquial Koine-Greek; the elements "... first" and "... second" are either represented by -πρῶτος, -δεύτερος or by -μονος, -δύος e.g. εἰκοστόπρῶτος, ἑβδομηκοστόμονος, ἑβδομηκοστόδύος. Instead of the expected ordinal element μυριοστο- this system has μυριο- e.g. ἑξακισμυριοτετρακισχιλιοστός "64.000th", δισμυριεπτακισχιλιοστός "27.000th".

10.3.2.3.4. *Cardinal plus Word in -πλασίων* (with -πλασίων *value of the whole*). The ten word groups of this kind that are attested show again either the increasing order: ἑπτὰ καί εἰκοσαπλασίων, or the descending: εἴκοσι καί τετραπλασίων, and may or may not contain καί: compare the preceding instances with: ἑπτὰ εἰκοσαπλασίων. The word groups for "13 . . . 19 times as much" are always increasing in order: τρεῖς καί δεκαπλασίων. Besides these there are two formations that are undoubtedly compounds: χιλιοκτακοσιογδοηκονταπλασίων, in which the cardinal bases χιλι(ο)- and ὀκτακοσι(ο)- serve as components, and ἑκατοντα(καί)εβδομηκονταπλασίων, of which also the first component is a basis ending in -α although strictly speaking only the second component should be so.

10.3.2.3.5. *Cardinal plus Word in -κισ* (with -κισ *value of the whole*). The component with the highest numerical value is always represented in these groups by a cardinal. A seeming exception only is found in τετταράκοντα καί πεντακισχιλιοστόν (Plato *Leges* 877d), which according to Liddell-Scott means "45.000th". It appears, however, from the context that this ordinal formation corresponds to the explicitly mentioned τετταράκοντα καί πεντακισχιλίων. With A. Diès we are therefore of the opinion that this numeral means rather "5040th" ("cinq mille quarantième" *ed.* Budé) than "45.000th", which would have been τετρακισμυριοστός (καί) πεντακισχιλιοστός.

The word groups show the increasing order in τρεῖς καί δεκάκισ up to ὀκτὼ καί δεκάκισ, and in ἑννέα καί εἴκοσι καί ἑπτακοσιοπλασιάκισ (Plato *Resp.* 587e), which is a combination of the older -πλάσιος

(Koine-Greek: -πλασιών) and -(ά)κις. The only descending word group is ἑβδομηκοντάκις ἑπτά (Gen. IV 24 and Matt. XVIII 22) "seventyseven times". It is not necessary to assume here any influence from the underlying $\text{הַשְּׁבַעִים הַשְּׁבַעִים}$, which are cardinals with multiplicative value: it is quite evident that the translator knew the word ἑπτάκις; in fact it precedes in the same verse rendering $\text{הַשְּׁבַעִים הַשְּׁבַעִים}$. The formation runs therefore parallel with word groups like $\text{τριακοστός καὶ εἷς}$, or δύο τριακοστός . The only instances of word groups consisting of two words in -κις that are known to us are: Matt. XVIII 22(*ms. D*) ἑβδομηκοντάκις ἑπτάκις and Aristarchus Sam. 13 $\text{τεσσαρακοντάκις καὶ πεντάκις}$. It has been conjectured by Wallis that the latter should be $\text{τεσσαρακοντακαὶ πεντάκις}$ (*cf.* Plato *Leges* 877d above), but there is no need to alter the text: the word group runs parallel with $\text{τεσσαρακοστός καὶ πέμπτος}$ (Jos. XIV 10); moreover, the conjecture is against the rule that the cardinal should have the highest numerical value.

10.4. Values.

10.4.1. *Value of the Cardinals.* The cardinals which form part of the different configurations outlined above have the common value of indicating a *definite* number without any further specification as to place in a series, number of times, *etc.* Transpositions to the numeral system, such as πόσοι, πολλοί, indicate an indefinite number.

The cardinals are unmarked as opposed to the ordinals, the multiplicative adverbs in -κις, and the multiplicative adjectives in -πλασιών, but this point can better be shown in the discussion of the values of these latter categories (*parr.* 10.4.2.-4).

The oppositions between basic cardinals, decads and hundreds are such that in *e.g.* $\text{ἑξ vs. ἑξήκοντα vs. ἑξακόσιοι}$ the word in -ήκοντα equals ten times the numerical value of the corresponding basic ἑξ , while ἑξακόσιοι has a numerical value which is a hundred times that of ἑξ . In multiplicative compounds like δισχίλιοι the numerical value of the latter parts -χίλιοι and -μύριοι is multiplied by the numerical value of the former parts δισ- , τρις- *etc.* In additive compounds, however, the values of both parts ἕν- , δύο- and -δεκα are added together. The same holds good of the additive word groups: $\text{ἑκατὸν τεσσαράκοντα τέσσαρες}$ has properly speaking the numerical meaning of "a hundred plus forty plus four".

10.4.2. *Value of the Ordinals.* These numerals always indicate a specific place within a series of identical beings or things. Each

ordinal corresponds to that cardinal which would indicate the number of things counted thusfar and added together.¹ As opposed to the cardinals the ordinals were probably marked, as there are instances of cardinals that have the ordinal value without even being member of an ordinal word group such as εἷς καὶ εἰκοστός. These instances are, however, restricted to Biblical Greek in our period and to the numeral εἷς:

Gen. VIII 13 μιᾷ τοῦ μηνὸς "on the first (day) of the month";

Apc. VI 1 μίαν ἐκ τῶν ἑπτὰ σφραγίδων "the first seal", but VI 3 τὴν σφραγίδα τὴν δευτέραν, VI 5 τὴν τρίτην, etc.

Apc. IX 12 ἡ οὐαὶ ἡ μία "the first woe", but XI 14 ἡ οὐαὶ ἡ δευτέρα. This usage may be considered as a Hebraism, because the Hebrew cardinal **אֶחָד** "one" could also have the meaning of "first". A late instance of δύο having the ordinal value is found in Apophth. Patrum 336b εἰς τὰς δύο ἑβδομάδας "in the second week" (V A.D.).

A further indication of the unmarked character of the cardinals as opposed to the ordinals may be the fact that εἷς, δύο, τρεῖς, etc. can occur in word groups with an ordinal value such as δύο καὶ εἰκοστός etc. (*par.* 10.3.2.3.2).

10.4.3. *Values of Words in* -πλοῦς and -πλασίων. The words in -πλοῦς have the value of "... fold" e.g. τριπλοῦς "triple, threefold", while those in -πλασίων mean "... times as much (many) as" e.g. τριπλασίων "thrice as many as". The latter are probably marked as opposed to the cardinals because word groups with -πλασίων value may have cardinal components e.g. ἔκκοσι καὶ τετραπλασίων (*cf. par.* 10.4.2).

10.4.4. *Value of Words in* -κις. These words indicate in a positive way a number of *times*, and were marked as opposed to the cardinals, as these latter, too, had a.o. a multiplicative aspect of meaning:

Ps. LXI (LXII) 12 ἄπαξ ἐλάλησεν ὁ θεός, δύο ("twice") ταῦτα ἤκουσα.

¹ According to context the order of counting may be relevant or not. If it is irrelevant the value of the ordinals is rather "completing the number of . . ." or "belonging to a group of . . ." e.g. Plato, *Tim.* 17a: ΣΩ. εἷς, δύο, τρεῖς· ὁ δὲ δὴ τέταρτος ἡμῖν, ὃ φίλε Τίμαιε, ποῦ τῶν χθὲς μὲν δαιτυμόνων, τὰ νῦν δὲ ἐστιατόρων; and Theocritus II 118-119 ἦνθον . . . ἡ τρίτος ἡ δὲ τέταρτος. See: E. Benveniste, *Noms d'agent et noms d'action en indo-européen*, Paris, 1948, p. 157 and chapter XI: *Le Superlatif et l'Ordinal*. J. Gonda, *o.c.*, pp. 138-139. E. Risch, *Das indogermanische Wort für "hundert"*, Indogermanische Forschungen 67, 1962, pp. 129 ss., explains ἑκατόν as having arisen from an original neuter ordinal "the tenth (decad)" i.e. "the one which completes the number of ten decads": -κατόν is related with -κοντα.

Apc. IX 12 ἰδοὺ ἔρχεται ἔτι δύο οὐαὶ μετὰ ταῦτα "behold, there is to come yet twice a Woe hereafter" (8^c, 025, 046 have ἐρχονται, obviously a correction);

Apc. XXII 2 ξύλον ζωῆς ποιῶν καρποὺς δώδεκα "the tree of life which bears fruits twelve times": κατὰ μῆναν ἕκαστον ἀποδιδούν τὸν καρπὸν αὐτοῦ. Probably there is Hebrew influence in these passages because in that language the cardinals, especially those of the dual category, had *a.o.* a multiplicative aspect of meaning *e.g.* in Psalm LXII 12 קָהָל and מִיָּמֶיךָ, Gen. IV 24 מִיָּמֶיךָ and מִיָּמֶיךָ. In Apc. IX 16 διςμυριάδες in all likelihood renders such a multiplicative dual (see *par.* 10.7.1).

This multiplicative use of cardinal numerals occurs, however, also in Non-Biblical Greek: P. Ross. Georg. III 4, 19 ταῦτά σοι γράφω εἰσάμα δύο "I write this to you twice at the time" (III A.D.).

We consider therefore the cardinals as unmarked and the *-κις* words as marked. We know of only one adverb in *-κις* that has been formed on the basis of an ordinal numeral: πεμπτάκις (Dio Cass. LIII 16), which according to Liddell-Scott has the meaning of "five times", but from the context it appears that the reference may be to the *fifth time* that Augustus' authority was prolonged. A different case is ἑβδομάκις (Callimachus *Del.* 251) which means "seven times", and does not necessarily have an ordinal basis, because ἑβδομ- is not confined to the ordinal system *cf.* ἑβδομήκοντα and ἑβδομάς.

10.4.5. *Values of Words in -χῶς, -χοῦ, -χόθεν, -χῆ.* These values are not different from those of the correlative adverbs of the pronominal system: διχῶς "in two ways", διχοῦ "in two places", διχόθεν "from two places", διχῆ "in two ways". There existed a fifth category, in *-χα* (antepenult or penult accent) which had the value "in . . . parts": δίχα, τρίχα, τέτραχα up to ἑπταχα and δέκαχα, but only δίχα is used in the Hellenistic period (also as a preposition with the genitive: "without, apart from"). The four categories mentioned did likewise not belong to popular Koine Greek, and none of these words is found in the LXX or in the N.T.

10.4.6. *Value of the Reduplicative Category.* The instances mentioned have a distributive value *e.g.* Mark VI 7 καὶ ἤρξατο αὐτοὺς ἀποστέλλειν δύο-δύο "and He began to send them out by twos, in pairs" (Vulgate: *binos*) *cf.* Genesis VI 19, 20, VII 2, 3, 9, 15 (Sept.). Probably only the basic cardinals of system 1 and the numeral εἷς of system 2 could be reduplicated. It is therefore no

coincidence that we find in the same VIth chapter of Mark the *non-reduplicated* κατὰ ἑκατὸν καὶ κατὰ πενήκοντα (Vulgate: *per centenos et quinquagenos* (v. 40). In this connection we think it doubtful whether the often quoted μυρία μυρία in Aeschylus' *Persians* is really distributive:

979. τὸν σὸν πιστὸν πάντ' ὀφθαλμὸν

980. μυρία μυρία πεμπαστάν

981. Βατανώχου παῖδ' Ἄλπιστον

.

985. ἔλιπες ἔλιπες;

In our opinion this doubled numeral has an emotional, not a distributive value, just as the doubled verb in line 985.¹ Moreover, μυρία has according to Herodian the meaning "countless", while μύρια means "ten thousand".

In the LXX the frequency of these distributives is due to the underlying Hebrew, whereas we may reckon with Aramaic influence in the Gospel of St. Mark. Nevertheless such formations occur also where no Semitic influence is to be assumed, for instance in Sophocles *frag.* 201 (*Eris*) μίαν-μίαν, P. Oxy 121, 19 τρία-τρία (III A.D.), and likewise in Modern Greek δέκα-δέκα "by tens". Doubled ordinals, however, such as δέκατον-δέκατον "each time a tenth part" (Numbers XXVIII 13, 21, 29 and XXIX 4, 10, 15) are as far as we know not found outside Biblical Greek in the Hellenistic period. Doubled substantives like the ones in Mark VI 39 συμπόσια-συμπόσια "in companies" and VI 40 πρασιαί-πρασιαί "in groups" have parallels in the LXX as well as in the Patristic literature: ζυγὴν-ζυγὴν in the Dialogue of Timothy and Aquila, *p.* 90-91 (*ed.* Conybeare), ζυγὴ-ζυγὴ in Epiphanius *De mens. et pond.* 3, *p.* 155 (*ed.* Lagarde), both meaning "in pairs".²

¹ Cf. the instances mentioned by H. Thesleff, *Studies on Intensification in Early and Classical Greek*, Soc. Scient. Fenn., Comm. Hum. Litt., XXXI, 1. Helsinki, 1954, *pp.* 194-195.

² A. J. Wensinck, *Un groupe d'aramaïsmes dans le texte grec des évangiles*, Meded. Kon. Ak. Wet. Letterk. vol. 81, ser. A. nr. 5, Amsterdam, 1936, does not mention any instances from Patristic literature. Moreover, Epiphanius, although surnamed "of Salamis", was born in Eleutheropolis (Judaea) ca. 315 A.D.: his use of the reduplication might be therefore a direct Aramaism. These formations run curiously parallel with Mycenaean *wetei-wetei* "every year" and *amati-amati* "every day", but there can hardly be any historical connection.

10.5. *Numeral System and Productivity*

None of the word series constituting the numeral system amounts to more than 50 words. The cardinal series has 45 members, the ordinals are represented by 43 words (with a possible addition of 11 if *δισχιλιοστός *etc.* would be attested). The remaining series have each less members though some of them might theoretically have about the same extent as the ordinals. The very fact that we can indicate the possible extension brings out that the *morphological* system of the numerals is *closed*. This may seem to contradict the fact that there is virtually no set limit for *counting*, but that is due to the productivity of a syntactical procedure, *viz.* that of additive word group forming, *e.g.* ἑκατὸν-τεσσεράκοντα-τέσσαρες. It is this procedure which enables the speaker to count so to say *ad infinitum*.

10.6. *Remaining Oppositions*

10.6.1. *Oppositions of Case and Gender.* In these only (δύο), τρεῖς, τέσσαρες, the hundreds, and χίλιοι, μύριοι and compounds (δισχίλιοι, *etc.*) take part. The numeral δύο, however, takes part in the oppositions of case only.

Declension.

Nom.m.	εἷς	acc.m.	ἓνα	gen.m.	ένός	dat.m.	ένί
nom.f.	μία	acc.f.	μίαν	gen.f.	μιᾶς	dat.f.	μιᾷ
nom.n.	ἓν	acc.n.	ἓν	gen.n.	ένός	dat.n.	ένί
nom.	δύο	acc.	δύο	gen.	δύο	dat.	δυσίν
nom.m-f.	τρεῖς	acc.m-f.	τρεῖς	gen.m-f.	τριῶν	dat.m-f.	τρισίν
nom.n.	τρία	acc.n.	τρία	gen.n.	τριῶν	dat.n.	τρισίν
nom.m-f.	τέσσαρες	acc.m-f.	{τέσσαρας τέσσαρες	gen.m-f.	τεσσάρων	dat.m-f.	τέσσαρσιν
nom.n.	τέσσαρα	acc.n.	τέσσαρα	gen.n.	τεσσάρων	dat.n.	τέσσαρσιν

Remarks. εἷς is declined in cardinal/ordinal word groups and in reduplications: U.P.Z. 81, 2, 14 πηχῶν εἴκοσι ένός, Jer. LII 1 εἴκοστοῦ καί ένός, Sophocles *frg.* 201 μίαν-μίαν; δύο, τρεῖς, τέσσαρες are declined in cardinal groups and probably also in reduplications: Gal II 1 διὰ δέκα τεσσάρων ἑτῶν. The accusative of τέσσαρες is either τέσσαρας or τέσσαρες; the latter on the analogy of the nom/acc. τρεῖς, occurs in Apc.-A at IV 4 and VII 1 (bis), whereas τέσσαρας is found at IV 4 (!), VII 1 (!) and IX 14. The declension of διακόσιοι, χίλιοι, μύριοι, *etc.*, is like that of the plural adjective δίκαιοι.

10.6.2. *Oppositions of Case, Number and Gender.* Only the ordi-

nals and the words in -πλοῦς, -πλασίων take part in these three oppositions at the same time:

τρίτος, -η, -ον : τρίτοι, -αι, -α
 τριπλοῦς, -ῆ, -οῦν : τριπλοῖ, -αῖ, -ᾶ, adv. τριπλῶς
 τριπλασίων, -πλάσιον: τριπλασίονες, -α, adv. τριπλασίως

They have no degrees of comparison with the only seeming exceptions of ἀπλοῦς-ἀπλούστερος and διπλοῦς-διπλότερος. These words, however, do not mean "more onefold" or "more twofold", but "simpler" and "twice worse than" (Matt. XXIII 15). Those in -πλασίων may syntactically be used as comparatives, and are then followed by ἤ or by the genitive of comparison.

According to the category of gender substantivated ordinals may have special aspects of meaning:

fem. (1) "day": Luke XIII 32 τῇ τρίτῃ "on the third day" (*cf. par.* 10.6.3.3).

(2) "tax": Heb. VII 2 δεκάτην "tithe"; P. Gnom. 85 ἑκατοστή "tax of 1 %"

neut. (3) "time": Apc. XIX 3 δεύτερον "for the second time".¹

(4) "fraction": Apc. VIII 7-12 τὸ τρίτον "the third part".

Instead of τὸ δεύτερον the word ἥμισυ is used for "half", which tended to become an indeclinable in Koine-Greek: ἥμισυ in Apc. XII 14 (*ms. A*), the fossilized (and anomalous) genitive ἡμίσου in XI 9 and II τρ(ε)ῖς ἡμέρας κ. ἡμίσου (all three in accusative constructions). The word is declined in Mark VI 23 ἕως ἡμισους.

The cardinals διακόσιοι *etc.*, χίλιοι, μύριοι, *etc.* seemingly take part in the opposition of number² as adjectives do, as they are opposed to διακόσιος, διακοσία, διακόσιον, *etc.* The meaning, however, of these latter words is not "200" but "consisting of 200", for instance in 1 Macc. VI 35 (A, S) πεντακοσία ἵππος "a cavalry brigade consisting of 500 men", Xenophon *An.* I, 7, 10 ἀσπίς μυρία καὶ τετρακοσία. Although ἵππος and ἀσπίς "a body of men-at-arms" did not occur in the plural with these same aspects of meaning, we do not believe that the opposition διακόσιος *vs.* διακόσιοι, which we prefer to consider as two different paradigms, was correlated with a difference in syntactical valence, implying for instance that διακόσιος could be combined only with singularia tantum.

¹ Cf. Kapsomenakis, *o.c.*, p. 50.

² So F. W. Householder in *Word Classes* (Lingua 17), 1966, p. 120.

As opposed to 3 Kings III 4 χιλίαν ὀλοκαύτωσιν “a burnt offering of 1000 cattle” the plural *χίλιαι ὀλοκαυτώσεις “burnt offerings of 1000 cattle” seems a possible idiom, but we do not have any instance of the kind.

According to Liddell-Scott s.v. εἷς there occurs a plural ἔνες in P. Oxy. 276,8 (77 A.D.) ἑκάτεροι ἔνες. The edition of this papyrus has, however, ἑκάτερος ἔνες. The text runs: lines 5-6 ὁμολογοῦσ[ιν A.] B and C, κυ-(7) βερνῇται π[λ]οίο[υ] ναυλωσίμου ἑκάτε-(8) ρος ενες δι'ἐπιπλόου Κλαυδίου Κέλερος στρατιώτου . . . (13) παριληφέναι etc.

It seems as though ενες here is a slip for ἐνός, which is then to be connected with πλοίου. This variation of ο/ε in final syllables is not infrequent in the Ptolemaic and Imperial papyri.¹ The words οὐδένες and μηδένες are, however, real plurals to οὐδεῖς, μηδεῖς; they negate the indefinite pronoun τινές, not the numeral εἷς. The latter is negated by οὐδὲ εἷς (μηδὲ εἷς), which has the late correlated adverb οὐδενάκι “not once” in Jamblichus, in *Nic. φ.* 19 P (with archaic -κι for -κίς).

10.6.3. Transpositions

10.6.3.1. *Of Cardinals to the Substantive System.* Τρεῖς to τριάς, gen. τριάδος. Basis either ending in -α- (as found in the category in -(ά)κίς) followed by -δ-: τριάς (cf. τριακόσιοι), τετράς, πεντάς, ἑξάς, ἑπτάς, ὀκτάς, ἑννεάς, δεκάς, τριακοντάς (only Vett. Val. 315, 16; usually τριακάς), but τεσσαρακοντάς etc., ἑνδεκάς, δωδεκάς, ἑκκαιδεκάς, etc., or apocopated and followed by -άδ-: δυάς (δύο), εἰκάς (εἴκοσι), τριακάς. (τριάκοντα), χιλιάς, μυριάς, δισχιλιάδες, δισμυριάδες, and also the variant formations πεμπάς, ἑβδομάς, ὀγδοάς (by the side of πεντάς, ἑπτάς, ὀκτάς). These words, for instance δεκάς, have the following aspects of meaning: “the number ten”, “a number of ten”, and “the tenth day of the month”. When having the last aspect they may form word groups with:

a) another transposition in -άς: Jer. LII 31 τῇ τετράδι καὶ εἰκάδι τοῦ μηνός “the twenty fourth of the month”;

b) a cardinal numeral: Exodus XII 18 ἕως ἡμέρας μιᾶς καὶ εἰκάδος “until the twenty first day”;

c) an ordinal numeral: Genesis VIII 14 ἑβδόμη καὶ εἰκάδι τοῦ μηνός, cf. already in Plato *Leges* 849b: τρίτῃ δὲ εἰκάδι.

In *compositional transpositions* the same bases occur as in the

¹ Kapsomenakis, *o.c.*, pp. 18-19.

categories of -πλοῦς and -πλασίων, but the element corresponding with εἷς is μον(ο)-: μονόπους, μονήμερος, δίπους, δεκάδραχμος, χίλιο-τάλαντος. Before a vowel the basis may suffer apocope but not necessarily: ἑπταετής occurs by the side of ἑπτετής. If the first element has been transposed from the so-called indefinite numerals it may end in -α- or not: compare ποσάπους, πολλατεχνία (P. Lond. ined. 2181) with πολυτεχνία, ὀλιγοτεχνία.

10.6.3.2. *Of Cardinals to the Verb System.* These transpositions have no common categorial value: δυάξω "to double", or "to halve", τριάξω "to triple" or "to win in wrestling" because one had to throw the adversary thrice, τετράξω "to observe a four day circle", πεμπάξω "to count" originally "to count on the five fingers", ἑβδομάξω "to keep the Shabbath", δεκάξω according to Hesychius: δεκάξων· ὁ εἰς δέκατον ἀριθμὸν ἔχων.

10.6.3.3. *Of Ordinals to the Adjective System.* Ἑβδόμη "the seventh day" (cf. *par.* 10.6.2) to ἑβδομαῖος "on, for, of the 7th day": apocopated feminine ordinal (*i.e.* minus -η) plus -αῖος [-έος] *e.g.* δευτεραῖος, τριταῖος, ὀγδοαῖος, τεσσαρεσκαίδεκαταῖος, πεντηχοσταῖος, πολλοσταῖος, and also εἰκοστοτεταρταῖος. In *compositional transpositions* the transposed numeral ends in -ο when the following element has initial consonant: πρωτότοκος, τεταρτομερίτης but is apocopated before vowels *e.g.* δευτεραγωνιστής, εἰκοστῶνης. The feminine basis in -η occurs occasionally as the first element under undefinable circumstances, for instance with following -μόριον, -μορίτης, -μοῖρία in ἐκτημόριοι *etc.*, but cf. on the other hand ἐκτολογία, ἐκτολογῶμαι.

10.6.3.4. *Of Ordinals to the Verb System.* Apocopated basis plus -εύω: πρωτεύω "to be first", δευτερεύω "to be second", τριτεύω "to hold the office of τριτευτής", ἑνατεύω "to have the 9th part removed for sacrifice", δεκατεύω "to exact tithe from", ἑκατοστεύω "to bear a hundredfold".

10.7. Peculiarities of Use in the Apocalypse

10.7.1. *Thousands.* It has already been observed that the Apc. does not contain any instances of compounds like τρισχίλιοι. Instead of these the author makes use of word groups that consist of the transpositions χιλιάδες, μυριάδες and a cardinal numeral:

- VII 4 ἑκατὸν τεσσαράκοντα ὃ χιλιάδες ἐσφραγισμένοι (046: -ων)
 VII 5-8 δώδεκα χιλιάδες (12 ×, in *vv.* 5 and 8 with : ἐσφραγισμένοι)

- XI 13 ὀνόματα ἀν(θρώπ)ων χιλιάδες ἑπτὰ
 XIV 1 ἑκατὸν τεσσεράκοντα τέσσαρες χιλιάδες ἔχουσαι, *etc.*
 XIV 3 αἱ ἑκατὸν τεσσεράκοντα τέσσαρες χιλιάδες, οἱ ἡγορασμένοι
 XXI 16 ἐπὶ στα[δίω]ν δώδεκα χιλιάδων.

In the former three of these passages the word χιλιάδες is syntactically used in the same way as χίλιοι or μύριοι, *cf.* in the LXX: 3 Kings X 26 τέσσαρες χιλιάδες θήλειαι ἵπποι. In XIV 1 and 3 it is an ordinary substantive, in XXI 16 it is ambiguous. Word groups consisting of χιλιάδες/μυριάδες and a cardinal may have two different semantic contents:

a) "...-thousand" resp. "... ty-thousand" b) "... thousands of, myriads of". Outside of these word groups χιλιάδες, μυριάδες have only the meaning of "thousands", "myriads", whereas the meanings "one thousand" and "ten thousand" are carried by χίλιοι, μύριοι:

- V 11 καὶ ἦν ὁ ἀριθμὸς αὐτῶν· μυριάδες μυριάδ[ων] καὶ χιλιάδες χιλιάδων
 XI 3 (XII 6) ἡμέρας χιλίας διακοσίας ἐξήκοντα
 XIV 20 σταδίων χιλίων ἑξακοσίων
 XX 2, 3, 4, 5, 6, 7 (τὰ) χίλια ἔτη

In the first of these passages it is curious to see how the author, who quotes Daniel VII 10, either deliberately alters the LXX and Theodotion's version which have χίλιοι χιλιάδες and μύριοι μυριάδες, or renders the original Aramaic in such a way that he can avoid χίλιοι and μύριοι, because these, as we have seen, would carry in his use of language the meanings of "one thousand" and "ten thousand". This is evidently what he does not want to say, but rather: "myriads of myriads" and "thousands of thousands".

A complicated case is: IX 16 καὶ ὁ ἀριθμὸς τῶν στρατευμάτων τοῦ ἱππικοῦ διςμυριάδες μυριάδων (so A, 025, five cursives, Origen, Gigas, Vulgate); remaining uncials: **κ** δυο μυριαδων μυριαδας (acc. depends on *v.* 17 ηκουσα), P 47 δυο μυριαδες μυριαδων, 046 with 21 cursives and Tyconius: μυριαδες μυριαδων. Of these variant readings it is undoubtedly that of A *etc.* which is the more unusual and consequently to be seen as the *lectio difficilior*. We know of only one parallel of διςμυριάδες, likewise attested in *ms.* A, *viz.* at 1 Macc. IX 4 διςχιλιάσιν ἵππων "2000 horses", where the other *mss.* read διςχιλίῃ ἵππῳ *i.e.* "cavalry amounting to 2000". The queer point here is that these words do not have the value of plurals

corresponding to resp. *δισμυριάς and *δισχιλιάς.¹ It looks like a transposition of δισμύριοι to the substantive class, which has retained the plurale tantum character of the transposed numeral. The readings, however, of **κ** and P47 δισμυριαδες (-δας) have many parallels in the LXX *e.g.* at 2 Esdras XVII 71, and 2 Macc. XII 26 and 28. The conclusion may therefore be justified that the variants with δύο have arisen from the desire to make the wording of *ms.* A more colloquial, while those without either δις or δύο seem to simplify the text still further without impairing—as we will expose below—the semantic content of the passage.

Apc. IX 16 is certainly a quotation from, or at least reminiscent of Psalm LXVIII 18 רָכַב אֱלֹהִים רִבּוֹתִים, in which רִבּוֹתִים “10.000” is a dual numeral. As in Hebrew the duals of numerals had *a.o.* a multiplicative aspect of meaning, it need not surprise that the LXX have rendered this verse by τὸ ἄρμα τοῦ θεοῦ μυριοπλάσιον (LXVII 18). Our δισμυριάδες or δις μυριάδες then might be a literal reproduction of this dual רִבּוֹתִים, and be equivalent to μυριοπλάσιον or μυριάκις.² The translation of IX 16 should be then rather “a tenthousandfold of tens of thousands” than “twice myriads of myriads”. As this is exactly the way in which we should have to render the variant reading of 046 μυριάδες μυριάδων we think it highly probable that the scribe responsible for it must have known what this δις of *ms.* A *etc.* really was worth, and therefore cancelled it on purpose seeing that its lack did not alter the sense to any extent, but could prevent misunderstandings on the part of the hearer/reader. His knowledge may have sprung from reading Ezekiel XLI 6 where δις plays a similar rôle: καὶ τὰ πλευρὰ πλευρὸν ἐπὶ πλευρὸν τριάκοντα καὶ τρεῖς δις. According to the Masoretic text this must mean “33 times” although it does not have here the (multiplicative) dual of the numeral “33”, but the substantive עָצָרִים “times”. The Hebrew original, therefore, which underlies the LXX must have been different here from the Masorah and its wording is likely to have contained a dual numeral of some kind.³

¹ Not attested although the latter is mentioned by Liddell-Scott as occurring in 1 Macc. IX 4, where it is supposed to have the meaning of a “number of twenty thousand” (?!)

² J. D. Michaelis, *Inleiding in de Godlijke Schriften van het Nieuwe Verbond* (translated by G. F. C. Rutz, The Hague, 1778), p. 1063, adduces Psalm LXVIII 18 (Mas.) but does not mention the multiplicative implication.

³ See G. Mussies, ΔΥΟ in *Apocalypse IX 12 and 16*, *Novum Testamentum* IX, 1967, p. 151 ss.

Finally we want to remark in this connection that translators should not compute the product of such numerical passages as Apc. V 11 or IX 16 (e.g. Moffatt: “*two hundred millions*”), for in this way the Hebrew connotations of הַלָּאָה (χιλιάς) and הַרְבֵּה (μυριάς) are destroyed: 1000 in the O.T. is the round figure for “a division of an army” or for “a clan”, while 10,000 implies “a complete army, or fighting force”. Moreover, precise numbers do not make much sense in the contexts mentioned and may cause (and have caused) false interpretations.

10.7.2. *Gender*. It is unknown which gender was used when numerals did not strictly refer to things counted. In the Apc. such a usage occurs once: the number of the “Beast” is given in XIII 18 ἑξακόσιοι ἑξήκοντα ἕξ in the masculine gender, perhaps so because of the preceding ἀριθμὸς γὰρ [ρ] ἀν(θρώπ)ου ἐστίν. An instance from Classical Attic is Euripides *frag.* 888 βέβληκε’ Ἀχιλλεὺς δύο κύβω καὶ τέσσαρα “Achilles has thrown two aces and a four”. The word to which this neuter τέσσαρα might reasonably refer would be masculine: κύβους! This example illustrates the dangers of assuming ellipses and of inserting words that can be supplied. The numeral is here used to indicate a number as such, not a number of things.

The gender used in abstract counting can only be guessed at ¹ neither do we know whether there existed any special numerals for *counting* such as the German *eins*, *zwo*, *drei*, etc. which are used instead of *ein(e)*, *zwei* elsewhere, Russian *ras*, *dwa*, *tri*, instead of *ad'in* (*adná*, *adnó*) elsewhere, or the whole series in Javanese: *ji*, *ro*, *lu*, *pat*, *ma*, *nēm*, *tu*, *lu*, *na*, *luh*, for *siji*, *loro*, *tělu*, *papat*, *lima*, (ě-) *nēm*, *pitu*, *wolu*, *saña*, *sěpuluh*, which are used under other circumstances.²

¹ In Plato *Tim.* 17a Socrates counts his companions of course by using the masculine εἷς, δύο, τρεῖς . . .

² E. M. Uhlenbeck, *De Systematiek der Javaanse Telwoorden* (i.e. The Systematics of the Numerals in Javanese), B.K.I. 109, 1953, p. 348.

CHAPTER ELEVEN

THE VERB SYSTEM

11.1. *Introduction*

The verb system of Non-Attistic Koine Greek consists of at least 323 morphological *categories*. We say "at least" because the total number would have been higher had we added the figures of those categories that are disappearing in this period, like duals *etc.*, which kept being used by Atticizing authors, but were obsolete in actual speech. All these categories can be described on the basis of only 20 morphological *oppositions*: the much higher number of categories is of course due to the various ways in which these oppositions are combined within the single words. The meaning of each indicative verb for instance, is a specific combination of three values out of twelve, *e.g.* ἐπαίδευσας, the 2nd person singular of the active aorist indicative is semantically opposed to:

- a) five values of person *e.g.* ἐπαίδευσα, ἐπαίδευσεν, *etc.*
- b) one value of voice: ἐπαιδεύθης
- c) three values of aspect: ἐπαίδευσες, παιδεύσεις, πεπαίδευκας
- d) moreover to a number of mood values which do not concern us now.

The meanings of all the other indicative verbs constitute combinations of values which differ by at least one value from the above combination, except of course by the indicative mood value which all have in common. Due to the different combinations of these twelve values the total number of indicative verbs would already amount to 48 (*i.e.* $6 \times 2 \times 4$). Actually, however, the total number is 72 *i.e.* $(6 \times 2 \times 4) + (6 \times 2 \times 2)$, because some of the indicatives (the duratives and the perfectives) take also part in the opposition "non-past" *vs.* "past".

Since almost all morphological categories show varieties in form, it will be convenient to mention one form as example, and to postpone the description of the different processes of formation and the listing of the unproductive verbs. In this way we shall first try to outline the essential structure of the verb system as a whole, and for the time being leave aside what would otherwise only blur our overall picture.

For the semantic description of the twenty morphological oppositions two basic notions are relevant:

a) The persons involved in the speech situation, to whom the verb may refer, namely the participants of the speech situation: the addresser (speaker/writer) and the addressee, and the non-participants.

b) The "action" (e.g. τέμνω), the "quality" (e.g. λευκαίνω) or the "state" (e.g. λανθάνω) to which any verb refers. In our further discussion we shall indicate these three indiscriminately by the term "action".

The categorial values found in the verb system of Koine Greek differ from one another in the following points, which constitute different relations between the above notions a) and b):

(1) According to the participants or non-participants of the speech event that are also involved in the action indicated by the verb e.g. παιδεύω—παιδεύεις—παιδεύει—παιδεύειν etc.: oppositions of *person* (here: "addresser" vs. "addressee" vs. "non-participant" vs. "indifference as to person").

(2) According to the direction of the action with regard to the person: παιδεύω—παιδεύομαι: oppositions of *voice* (here: "action proceeds *from* person" vs. "action proceeds *to* person").

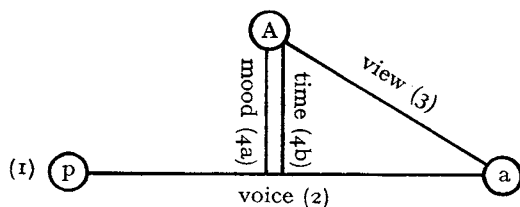
(3) According to the view which the *addresser* has on the action as such: ἐπαιδεύομεν—ἐπαιδεύσαμεν—πεπαιδεύκαμεν: oppositions of *view*, which term we shall use instead of the traditional "*aspects*" (here: "action seen while going on" vs. "action seen with indifference as to its progress" vs. "action seen as completed").

(4) According to the attitude of the *addresser* towards the relation between the action and the person involved in that action:

4.a) As to the existence of that relation e.g. παιδεύοις—παίδευε—παιδεύειν: oppositions of *mood* (here: "relation assumed as possible" vs. "relation commanded" vs. "indifference as to the existence of the relation").

4.b) As to the time of that relation compared with the moment when the speech event takes place e.g. ἐπαίδευες—παιδεύεις: oppositions of *time* (here: "before the moment of speaking" vs. "indifferent as to time").

Schematically the different relations between person and action, addresser and action, addresser and relation person—action can be drawn as follows:



A = addresser p = person(s) a = action

It is impossible to discuss all these values and their form correlates in a strictly logical order, because one form difference between two sets of verbs may be correlated with two or more differences in value at the time, and similar values, for instance those mentioned sub 4.b, are sometimes correlated with form differences which do not run parallel, and have quite different positions in the system as a whole. For these reasons we propose to carry through the following order of discussion:

α) The different persons and combinations of persons involved in the action amount to six. Each of these is correlated with two differences in form according to the direction of the action: active *vs.* medio-passive. As all the verb categories (except for the infinitives and the participles) occur in twelvefold by their participation in these oppositions of persons and voice, we think it convenient to begin our description with discussing these. After that we can simplify matters by representing them by one sample *e.g.* by the 2nd person singular active. The infinitives and participles which are both indifferent as to person must be mentioned apart, the former because they also have a unique value of mood, the latter because they are transpositions with a unique status somewhere in between verb and adjective.

β) In this simplified manner we shall deal with the next set of categories *viz.* 4.a, 4.b (partly), and the participles. These categories recur a number of times as a coherent group within the verb system and clearly form a subsystem.

γ) The third phase of our description will cover the mutual differences of these subsystems *e.g.* durative *vs.* aoristic *vs.* futural. After that we shall be in a position to give an overall picture of the verb system. Separate chapters will be devoted to the periphrastic tenses and the peculiarities of the verb in the Apc.

II.2. *Categorical Values*

II.2.1. *Values of the Categories of Person and Voice.* These categories have each several form variants within one verb paradigm. Although the personal values remain the same, they are correlated with a variety of forms according to their combination with other categories. One and the same value of person, therefore, may be correlated with different forms in the active and medio-passive voices, in non-historical and historical indicatives, and in the indicative, optative and imperative moods, for instance the 2nd person singular with *e.g.* λούεις—ἐλουες—λούης—λούοις—λοῦε—ἐλούου—λούῃ—λούοιο—λούου. Only in two cases are these form differences at the same time correlated with another value, without the help of additional form differences, namely in the categories of voice and in the opposition of mood between the indicative and the imperative.¹ We shall therefore give here as form examples a set of four: the so-called “present” indicative (act. and medio-pass.), and the “present” imperative (act. and medio-pass.).

	ind.act.	ind.m.-p.	imp.act.	imp.m.-p.
1 p.sg.	παιδεύω	παιδεύομαι	—	—
2 p.sg.	παιδεύεις	παιδεύει/-η	παίδευε	παιδεύου
3 p.sg.	παιδεύει	παιδεύεται	παιδεύετω	παιδεύεσθω
1 p.pl.	παιδεύομεν	παιδεύμεθα	—	—
2 p.pl.	παιδεύετε	παιδεύεσθε	παιδεύετε	παιδεύεσθε
3 p.pl.	παιδεύουσιν	παιδεύονται	παιδεύετωσαν	παιδεύεσθωσαν

The 2nd person plural of the present indicatives and the present imperatives are never different in form. We have mentioned both παιδεύετε and παιδεύεσθε twice in the scheme, because we are of the opinion that we have here to do with four different words. The pairs mentioned are homophones, but in Greek there is a gap between the indicative and imperative values.

¹ The well known subdivision into “primary” and “secondary” endings cannot be shown to have corresponded as such with a difference in value between non-past indicatives and subjunctives on the one hand, and past indicatives and optatives on the other. Moreover, it is clear only in the middle voice, at least so in Koine-Greek, and does not hold there for the imperatives, which have their own peculiar endings. Cf. the discussion by J. Gonda, *The Character of the Indo-European Moods, With Special Regard to Greek and Sanskrit*, Wiesbaden 1956, pp. 47-48, and the literature there quoted.

II.2.I.I. *Personal Values.* The above forms, to which we shall refer by the traditional terms, are correlated with the following values:¹

1.p.sg. "addresser" (cf. ἐγώ) 2.p.sg. "addressee" (cf. σύ)	3.p.sg. "non-participant" (cf. αὐτον, αὐτόν)
1.p.pl. "addresser plus addressee(s) and/or non-participant(s)" (cf. ἡμεῖς) 2.p.pl. "addressee (plus addressee(s) and/or non-participant(s)" (cf. ὑμεῖς)	3.p.pl. "non-participant(s)" (cf. αὐτους, αὐτούς)

II.2.I.I.I. *The 1st and 2nd persons plural.*

Instances of which the context explicitly shows the correlated combinations are from older Greek: Plato *Phaedo* 59d εἰώθειμεν φοιτᾶν καὶ ἐγὼ καὶ οἱ ἄλλοι, and *Phaedo* 61d ἀκηρόατε σύ τε καὶ Σιμμία. However, these forms can also refer to the addresser only resp. to the addressee only, just as ἡμεῖς and ὑμεῖς. This usage, the so-called reverential plural, does not occur in the Apc., but is frequent in St. Paul's letters.² We consider these categories therefore as unmarked in opposition to the corresponding singulars. All this necessarily leads to the conclusion that the traditional terms "singular" and "plural" which we have retained are not correct with regard to the 1st and 2nd persons; better terms would be "exclusive" and "non-exclusive" (cf. *par.* 9.2.2.2.).

II.2.I.I.2. *The 3rd persons singular and plural* constitute a different opposition: the 3rd person plural refers always to a plurality of non-participants of the speech act; the name "plural" is therefore correct, but the 3rd person singular does not wholly deserve its name, because of the well known fact that it can be syntactically combined with neuter substantives of the plural category for instance both the 3rd p. sg. and pl. with the plural neuter relative pronoun in Apc. I 19 ἃ εἰσιν καὶ ἃ μέλλει γείνεσθαι. The existence of this usage as such (the "σχῆμα Ἀττικόν") points to the fact that the

¹ E. Benveniste, *Structure des Relations de personne dans le verbe*, Bull. Soc. Ling. 43, 1946, pp. 1-12, arrives at a slightly different analysis: *je/tu*: personnes vs. *il*: non-personne; *je* vs. *tu*: corrélation de subjectivité; *je*: personne stricte, *nous* personne amplifiée. We feel that this analysis is essentially the same as ours although Benveniste does not explicitly base it on participation of the speech act.

² See K. Dick, *Der schriftstellerische Plural bei Paulus*, Halle 1900.

3rd p. singular (better: "non-plural") is unmarked as opposed to the 3rd p. plural. The opposition is reminiscent of that between the singular and plural substantive categories.

In N.T. Greek there is clearly a tendency to avoid this construction and to use the plural verb, when the neuter plural substantives, pronouns, *etc.* indicate living beings. In the Apc. the 3rd p. plural is connected with: ζῶα (IV 8, 9; V, 8, 14; XIX 4), ὄρνεα (XIX 21); with πνεύματα the verb wavers: the singular is used in IV 5 (A) ἐπτά λαμπάδες . . . ἃ ἐστὶν τὰ ἐπτά πν(εύμ)ατα (8^c, 025, 046: εἰσιν), but in XVI 13-14 we find both the plural and the singular verb: καὶ εἶδον . . . πνεύματα τρία ἀκάθαρτα] ὡς βάρσχοι· εἰσὶν γὰρ πνεύ[ματα] δαιμονίων ποιοῦντα σημεῖα [ἃ ἐκπο]ρεύεται ἐπὶ τοὺς βασιλεῖς *etc.*; in the latter verse it is a matter of dispute whether the relative pronoun is to be connected with πνεύματα or σημεῖα; the manuscripts are here far from unanimous: A has: α ἐκπορεύεται (supported by many cursives), 046 α ἐκπορεύονται, 8 and others have ἐκπορεύεσθαι (without relative pronoun).¹

II.2.I.I.3. Indefinite Aspect.

Contextually the 1st p. sg., 2nd p. sg., 3rd p. sg. and the 3rd p. pl. need not refer exclusively to speaker, addressee or a known non-participant, but may have a more general aspect of meaning, which can best be rendered by the indefinite pronoun "one": the 3rd p. *pl.* in Apc. XII 6 ἡ γυνὴ ἔφυγεν εἰς τὴν ἔρημον ὅπου ἔχει ἐκεῖ τόπον . . . ἵνα ἐκεῖ τρέφωσιν αὐτήν *etc.* "that one may feed her there", and so II 24, XVIII 14, XX 4. Possible instances of the 1st, 2nd and 3rd p. sg. with this general aspect of meaning are:

Rom. VII 9 ἐγὼ δὲ ἔζων χωρὶς νόμου ποτέ in which ἔζων cannot possibly refer to St-Paul, as he had been brought up with the Torah; ²

Hom. Δ 223 ἐνθ' οὐκ ἂν βρίζοντα ἴδοις Ἀγαμέμνονα δῖον "one might not have seen"; and so Xen. Cyr. I 6, 21 γυνίης ἂν *etc.* (no N.T. instances);

2 Cor. X 10 φησιν (B φασιν, Vulgate: *inquiunt*) introducing an assumed (or actual?) objection *cf. v.* 11 λογιζέσθω ὁ τοιοῦτος.

The 3rd person sg. medio-passive comes also under this heading

¹ Apc. VIII 2 (A) ἐδόθη . . . σάλπιγγες seems to be a mere error (*mss.*: ἐδόθησαν, with the exception of some uncials). The reverse construction of a 3rd p. pl. with a singular substantive can be explained as constructions *ad sensum*: VII 9-10 (unless the partitive gen. is taken as the logical subject), VIII 9, XIII 3-4.

² Blass-Debrunner, *o.c.*, *par.* 281.

e.g. Mk. IV 25 $\delta\varsigma\ \gamma\acute{\alpha}\rho\ \acute{\epsilon}\chi\epsilon\iota\ \delta\omicron\theta\acute{\eta}\sigma\epsilon\tau\alpha\iota\ \alpha\upsilon\tau\omicron\upsilon$. In Greek the verb must be transitive; it had no parallels to Latin *itur* (as opposed to *it*).

II.2.1.1.4. *Impersonal Verbs*. The 3rd person sg. is the category which is used when the verb is impersonal, which means that it does not refer to a person or even to a thing involved in the action, as in $\acute{\upsilon}\epsilon\iota$ "it rains", $\nu\epsilon\acute{\iota}\phi\epsilon\iota$ "it snows". It is true that these verbs may be personal e.g. P. Oxy 1482, 6 Ζεὺς ἔβρεχε cf. Matt. V 45, or when the weather itself is the somewhat pleianastic subject: Apc. XI 6 $\acute{\iota}\nu\alpha\ \mu\acute{\eta}\ \acute{\upsilon}\epsilon\tau\omicron\varsigma\ \beta\rho\acute{\epsilon}\chi\eta$ (the Vulgate has only: "*ne pluat*"). However, when no actor is explicitly mentioned, and one merely wants to say that it rains, $\beta\rho\acute{\epsilon}\chi\epsilon\iota$ is used without implying a relation to any person etc. whatsoever. The verb indicates then the existence of the act of raining as such, in opposition to the infinitive $\beta\rho\acute{\epsilon}\chi\epsilon\iota\nu$, which is non-committal as to the existence of the action.

II.2.1.1.5. *Mutual Oppositions of the Personal Categories*. As the values of severall pers. categories show a distinction between "definite" and "indefinite" ("one") the oppositions can only be described by considering the definite distinctions. We have seen that the 1st and 2nd persons singular are marked as opposed to the plurals, but that the 3rd person singular is unmarked as opposed to the plural. These six categories together are probably marked as opposed to the infinitive which is non-committal as to person, and may contextually imply all these values: a 3rd person e.g. in Luke IX 2 $\acute{\alpha}\pi\acute{\epsilon}\sigma\tau\epsilon\iota\lambda\epsilon\nu\ \alpha\upsilon\tau\omicron\upsilon\varsigma\ \kappa\eta\rho\acute{\upsilon}\sigma\sigma\epsilon\iota\nu$, and Luke II 26 $\acute{\iota}\delta\epsilon\acute{\iota}\nu$ (*scil.* $\alpha\upsilon\tau\omicron\upsilon\nu$), a 2nd person in the "infinitivus pro imperativo", a 1st person e.g. in Sophocles *Philoctetes* 234-5 $\phi\epsilon\upsilon\ \tau\omicron\ \kappa\alpha\acute{\iota}\ \lambda\alpha\beta\epsilon\acute{\iota}\nu$ (*scil.* $\acute{\epsilon}\mu\acute{\epsilon}$).¹ The oppositions of the personal categories and the infinitive were then probably as follows:

Marked						Unmarked
With Specification of the Persons Involved						Without Specification of Persons
Participant				Non-Participant		
Addresser		Addressee				
marked excl. λούω	unm. non-e. λούομεν	marked excl. λούεῖς	unm. non-e. λούετε	unm. non-pl. λούει	marked plural λούουσιν	infinitive λούειν

¹ Blass-Debrunner mention no certain N.T. instances (*par.* 407): cf. Heb XIII 6 (P 47, M) with the other *mss.*; perhaps also John IV 20 'we' or 'one'?

II.2.1.2. *Values of Voice.* The form differences between:

ind. act παιδεύεις — ind. med-pass. παιδεύει
imp. act. παίδευε — imp. med-pass. παιδεύου,

which have all four the value of reference to the 2nd person singular, are as opposed to one another correlated with a different set of values, the “voices”. This traditional name indicates the directions that the action can take with regard to the person referred to, here the 2nd p. sg.

II.2.1.2.1. *Active — Middle — Passive.*

The value of the *active* voice is such that the action proceeds *from* the person: παιδεύεις “the action of educating proceeds from you, you educate”. It is not positively indicated whether the action has any more relations with the person, besides this “proceeding from”.

Within the value of the *medio-passive* or *middle* voice four distinctions must be made:

1-a) *Reflexive-Reciprocal Aspect.* The action proceeds *from* the person and has a second relation with the same person, who is also the goal or object of the action: παιδεύει “the action of educating proceeds *from* you and goes then *to* you, you educate yourself”. The plurals are either reflexive or reciprocal: παιδεύεσθε means “you educate yourselves” or “one another”.¹

1-b) *Indirect Reflexive Aspect.* The action proceeds *from* the person and if it proceeds to a goal this goal is not identical with this person. Nevertheless the action has a second relation with this person, which we may vaguely describe as *indirect*: the action goes on in behalf of or to the disadvantage of the person indicated, or has simply his concern only. Παιδεύει means then “the action of educating proceeds from you (to another) and is in your behalf, has your concern”, “you educate (him, etc.) for yourself”.

2-a) *Causative-Reflexive Aspect.* The action is caused by the person indicated to proceed from elsewhere *to* himself: παιδεύει “you have yourself educated”.

2-b) *Tolerative-Passive Aspect.* The action proceeds from elsewhere *to* the person indicated, who either willingly allows or passively suffers the action to happen to him: παιδεύει “you allow yourself to

¹ J. Vendryes, *Une catégorie verbale: Le mode de participation du sujet*, Bull. Soc. Ling. 44, 1947-48, pp. 1 ss. Instances of “moyen réciproque”: Plato *Gorgias* 523a “*se partagèrent*”, Aristoph. *Ranae* 857 “*se disputer*”.

be educated” or “you suffer yourself to be educated, you are educated”.

11.2.1.2.2. *Deponent Verbs.*

Whenever verbs lack either the active or the middle categories, the former are traditionally referred to as *deponents*, while the latter have no special name, for instance the deponent μάχομαι and the intransitive verb ἰλιγγιῶ “to become dizzy”. It stands to reason that such verbs, too, imply some kind of relation between the person indicated and the action, but the direction of the latter with regard to the person cannot be specified. As both the activa tantum and the media tantum (deponents) are not opposed to another category of voice, their values are consequently different from those of such a pair as παιδεύω—παιδεύομαι. Compare the similar position of the singularia and the pluralia tantum.

One may be inclined to consider such verbs as active or as medio-passive in value, as is done by our school grammars with regard to the Deponents in Latin which are considered to be active in value but passive in form. This assumption depends on the fact that the syntactical combinability for instance of a middle deponent may resemble that of an active verb, but note that e.g. μάχομαι cannot be connected with an accusative of object.

11.2.1.2.3. *New Testament Usage.* The N.T. offers plenty examples of the active, causative and tolerative-passive aspects. The reflexive and indirect reflexive values, however are of rare occurrence according to Turner who lists only seven instances.¹ It is unclear whether he claims to give a complete enumeration, in any case his list would have to be supplented by the following passages:

Mk. IV 1 συνάγεται πρὸς αὐτὸν ὄχλος and VI 30, VII 1 (vs. John XI 47 συνήγαγον . . . συνέδριον);

Luke I 66 ἔθεντο . . . ἐν τῇ καρδίᾳ αὐτῶν and IX 44, XXI 14 B³ (vs. Luke VI 48 ἔθηκε θεμέλιον ἐπὶ τὴν πέτραν);

Acts IX 39 καὶ παρέστησαν αὐτῷ πᾶσαι αἱ χῆραι κλαίουσαι καὶ ἐπιδεικνύμεναι χιτῶνας κ. ἱμάτια ὅσα ἐποίει μετ’ αὐτῶν οὕσα ἡ Δορκάς: it is clear that in this situation the poor widows pointed to the clothes which they were wearing: “they showed him the garments and clothes which they wore” (vs. Acts XVIII 28 ἐπιδεικνύς διὰ τῶν γραφῶν εἶναι τὸν Χριστὸν Ἰησοῦν);

¹ N. Turner, *A Grammar of New Testament Greek*, vol. III *Syntax*, Edinburgh 1963, p. 54.

I Cor. XII 28 καὶ οὗς μὲν ἔθετο ὁ θεὸς ἐν τῇ ἐκκλησίᾳ, πρῶτον ἀποστόλους *etc.* "God has set people within *His* church" or "has set *Himself etc.*";

Gal. III 3 ἐναρξάμενοι πνεύματι νῦν σαρκὶ ἐπιτελεῖσθε; "are you now trying to find *your* fulfilment in the flesh?" (*vs.* Phil. I 6 ὁ ἐναρξάμενος ἐν ὑμῖν ἔργον ἀγαθὸν ἐπιτελέσει ἄχρι ἡμέρας Χριστοῦ Ἰησοῦ);

Col. I 6 ἐν παντὶ τῷ κόσμῳ ἐστὶν καρποφορούμενον (*sc.* τὸ εὐαγγέλιον) "it is bearing *its* fruit" or "from itself" (but Col. I 10 ἐν παντὶ ἔργῳ ἀγαθῷ καρποφοροῦντες "bearing fruit *sc.* to *Him*, *cf.* the preceding 9 ἵνα πληρωθῇτε τὴν ἐπίγνωσιν τοῦ θελήματος αὐτοῦ);

I Thess. V 9 οὐκ ἔθετο ἡμᾶς ὁ θεὸς εἰς ὀργήν "God did not destine us for *His* wrath".

Nevertheless Turner is probably right in saying that the reflexive aspect was rare, especially when we see that on the other hand the reflexive pronoun occurs rather frequently and that it is often added to active verbs, where Plato would have preferred the middle *e.g.* John II 24 ἐπίστευεν ἑαυτὸν αὐτοῖς, V 18 ἴσον ἑαυτὸν ποιῶν, VIII 22 ἀποκτενεῖ ἑαυτόν, XI 33 ἐτάραξεν ἑαυτόν, XI 55 ἀγνίσωσιν ἑαυτούς *etc.* This usage is peculiar as both Hebrew and Aramaic possessed reflexive verb tenses. Turner considers it as an indication of an increasing confusion of both voices in the N.T., but some of the medio-passives which he adduces to demonstrate this point, happen to be the instances that we should like to add to his list of reflexive examples.¹

We think that the whole matter deserves a careful research, in which it should be stated each time whether a given verb is deponential in Koine Greek in general, in the use of language of a specific author, or in one tense only of the verb. Such a research is beyond our present scope, but in our opinion it is certainly incorrect to say that the trend in the Hellenistic period was to drop the middle voice: ² it is still extant in Modern Greek and has there a reflexive-reciprocal-passive value.³ Schwyzer who points in this

¹ Turner, *o.c.*, p. 54.

² Turner, *o.c.*, p. 57.

³ A. Thumb, *Handbuch der neugriechischen Volkssprache*, Strasbourg 1910, pp. 108-109; A. Mirambel, *Remarques sur les voix du verbe grec moderne et l'expression du passif*, Bull. Soc. Ling. XLV 1949, p. 111 ss. Blass-Debrunner's remark which says that Modern Greek has a passive-deponential voice by the side of the active is inaccurate (*o.c.*, par. 307, *cf.* Turner, *o.c.*, p. 53).

connection also to Koine Greek makes a too absolute remark when he says: "*In der Koine wird das Reflexivpronomen bei indirekt reflexivem Medium ständig z.B. διμερίσαντο τὰ ἱμάτιά μου ἑαυτοῖς* LXX Psalm XXI 19." : compare above Acts IX 39; 1 Cor. XII 28; 1 Thess. V 9. The phenomenon is present in LXX and N.T., but it is certainly not the rule.¹

11.2.1.2.4. *Oppositions.* Unlike the middle voice the active does not involve a positive indication of a second rôle of the person referred to: the middle is therefore marked, the active unmarked. The only point of difference between the two may even be the indication of the person's emotional engagement in the action. Moreover, since the active as the unmarked category has a neutral aspect of meaning it is often possible to use an active "instead" of a middle: in a context where it is clear that I am washing my *own* hands it will do to use *νίπτω* (τὰς χεῖρας) instead of *νίπτομαι* (τὰς χεῖρας). A N.T. instance: James IV 3-4 οὐκ ἔχετε διὰ τὸ μὴ αἰτεῖσθαι ὑμᾶς· 4. αἰτεῖτε κ. οὐ λαμβάνετε, διότι κακῶς αἰτεῖσθε, ἵνα ἐν ταῖς ἡδοναῖς ὑμῶν δαπανήσητε (one of Turner's examples of voice confusion).

The active *αἰτεῖτε* because of its neutral character, can be used here between the preceding *αἰτεῖσθαι* and the following *αἰτεῖσθε*. A third middle verb would probably overemphasize: it is unnecessary, because the author now wants to bring out only that their asking had no results, it is *οὐ λαμβάνετε* that is stressed. The active offers here also an opportunity of varying the style.

A second instance: Matt. XXVI 51 ἀπέσπασεν τὴν μάχαιραν αὐτοῦ. This situation might allow of the use of a middle (*cf.* Mark XIV 47 *σπασάμενος τὴν μάχαιραν*), but can be sufficiently described without it. It is this indifferent aspect of the active voice that may suggest random use and has induced scholars to speak of voice confusion. On the other hand the active is also used to *negate* the presence of any second relation between action and person, *e.g.* Luke VII 5 τὴν συναγωγὴν αὐτὸς ὠκοδόμησεν ἡμῖν: if this noble deed could be referred to by a middle verb it would not deserve being mentioned!

11.2.1.2.5. *Passive Aorist and Passive Future.* These tenses would have to be discussed elsewhere in view of their place in the whole verb system, as their values of voice are correlated with

¹ Schwyzler, *o.c.*, II, p. 236.

form differences that are not at the same time correlated with values of person. We must see, however, in what way their voice value is opposed to that of the active and middle aorists and futures.

These oppositions are:

fut.act. παιδεύσομεν — medio-pass. παιδευσόμεθα — pass. παιδευθησόμεθα

aor.act. ἐπαιδύσαμεν — medio-pass. ἐπαιδευσάμεθα — pass. ἐπαιδύθημεν.

The passive value is correlated with presence of the element *-θη-*, and is described in *par.* II.2.1.2.1 sub 2-a and 2-b, but comprises incidentally also aspects 1-a and 1-b. It is of no significance whether the forms of their personal categories are “active” or “middle”: both occur indiscriminately with *-θη-*: ἐπαιδύθημεν by the side of παιδευθησόμεθα. As these forms are not opposed to e.g. *ἐπαιδευθήμεθα or *παιδευθήσομεν, it is clear that here the opposition *-μεν/-μεθα* is not correlated with a difference in voice value.

There was in 1st century Koine Greek a tendency to avoid an opposition of these medio-passive and passive verbs, which means that of a specific verb either the middle or the passive aorists and futures were used, but not both of them by each other's side. On the whole, however, it is the passive forms that were preferred. The rather extensive Gospel of St. Luke contains only 6 instances of probably middle aorists or futures which have passive pendants elsewhere in the New Testament.

All this can only be interpreted as a process of levelling of both categories, and in such an increasing unification it would be natural for the passive category to take over the typical reflexive and indirectly reflexive aspects of the middle category. In spite of the rarity of these aspects, to which we have pointed above, there are in the N.T. some passives with a reflexive value: γυνασθῆναι, θεασθῆναι, ὀφθῆναι, σταθῆναι, συναχθῆναι. To discuss only one instance: Acts II 14 σταθεὶς δὲ ὁ Πέτρος σὺν τοῖς ἑνδεκά . . . ἀπεφθέγγετο αὐτοῖς. Here σταθεὶς does not mean “when he had been placed” but rather “when he had taken *his* stand”. In the light of the above discussion we think it justified to consider the middle and passive forms as constituting one medio-passive category, in which there is complementary distribution in the aorist and future tenses of those forms that are traditionally called “medial” and “passive”.

II.2.2. *Values of the Categories of Mood.*

II.2.2.1. *Introduction.* We have pointed out that after carrying through the simplification of the categories of person and voice we shall deal with some sets of categories that recur a number of times within the verb system as a whole. Such a set or subsystem consists of five categories that express differences in the speaker's opinion on the relation person-action, the so-called *moods*, and a transpositional category, the participle. An instance is:

Indicative	Optative	Subjunctive	Imperative	Infinitive	Participle
a) παιδεύεις	παιδεύοις	παιδεύῃς	παιδεύε	παιδεύειν	παιδεύων
b) ἐπαιδεύεις					

This scheme is representative of all the subsystems except for the fact that only two of them contain two indicatives, which express an extra difference, namely that of time. We shall first discuss the oppositions between the moods, after that we can treat of the oppositions between the two indicatives belonging to one and the same subsystem.

The scope of the present study forbids us to discuss the values of the moods and tenses at great length, our main purpose being the analysis of their mutual relations and oppositions. We therefore are aware of the fact that the following paragraphs contain only sketches of subjects to which monographies could be (and have been) devoted, and that on the whole the number of instances quoted is rather low.

II.2.2.2. *The Value of the Indicative Mood.* It is commonly stated that the indicative refers to a fact *i.e.* it implies the speaker's assumption that the existence of the relation between person and action is a fact. In addition, however, to this factual aspect, the indicative can be shown to have had a potential aspect, which especially appears in the historical tenses (accompanied by ἄν) so as to express the *past* potentiality which the optative does not express in a positive way: *e.g.* ἔλεγέν (εἰπέν) τις ἄν. "someone might have said". According to Schwyzer this usage, which seems to be absent in the N.T.,¹ can, however, not be sharply distinguished from that of the past tenses occurring in unreal conditions, although in our opinion there may be some problems here with regard to the category of past time (see *par.* II.2.2.9.2). Although the potential

¹ Schwyzer, *o.c.*, II, *p.* 347 and Blass-Debrunner, *o.c.*, *par.* 360.3.

flavour of such phrases depends also on the particle *ἂν*, if present, we think it evident, that to say that something would (have) happen(-ed) under certain eventual circumstances implies the combination of two eventualities at the time. *Mutatis mutandis* the same holds good of the past indicative used in un-attained wishes, which are in Koine-Greek accompanied by the particle *ὄφελον*.

Now if this potential (or eventual) aspect of the indicative were restricted to the historical tenses it would perhaps be understandable why the latter have their so-called secondary personal endings in common with the optative mood, but this restriction is only seeming; the fact that the present indicative could be combined on the syntactical level with such words as *ἴσως* "perhaps", which qualifies the assumption of the speaker itself, suggests that the indicative mood as a whole, both in the past and in the non-past tenses, was fundamentally indifferent with regard to potentiality or eventuality, and that according to context it was either potential, or exclusive of possibility in such a way that it implied the actual existence, according to the speaker, of the relation person—action. Since the optative always indicated potentiality or eventuality (see *par.* II.2.2.3) this mood may be seen as marked as opposed to the indicative. Both moods have in common that their values are strictly assumptive and do not imply, therefore, any adhortative attitude.

II.2.2.3. *Value of the Optative Mood.*

II.2.2.3.I. *Survey of Occurrence in the N.T.* The optative did in all probability not belong to Non-Atticistic Koine-Greek.¹ In the N.T. it occurs some 68 times, mainly in the more literary writings: in Luke-Acts (especially in the speeches to the Athenians and to King Agrippa II), and in St. Paul's letters. It is not found at all in Matthew, Mark, John and in the Apocalypse. A quarter of the 68 occurrences is covered by the formula *μὴ γένοιτο*, which is also found in the Egyptian papyri of the Imperial period by the side of the synonymous expressions *ὃ μὴ εἴη*, *ὃ ἀπείη* and *ὃ μὴ εἴοιτο* (*i.e.* *εἴη*).² One may distinguish between independent use (*i.e.* in head clauses) and dependent use (in dependent clauses).

a) *Independent Use.* According to its traditional name the opta-

¹ G. Anlauf, *Standard Late Greek oder Attizismus? Eine Studie zum Optativgebrauch*, Cologne 1960, pp. 153-154.

² Kapsomenakis, *o.c.*, pp. 48 and 128.

tive category is the mood of the wish, more precisely of the wish that can still be fulfilled. Of this usage there are 38 instances in the N.T. *e.g.* Acts VIII 20 τὸ ἀργύριόν σου σὺν σοὶ εἶη εἰς ἀπώλειαν. The older construction of εἴθε with the optative, which also expressed a realizable wish, has now been replaced by ἤθελον / ἐβουλόμην with infinitive.

The so-called potential optative (usually but not necessarily accompanied by ἄν), which expresses the possible existence of a relation person—action is found with certainty in only three N.T. passages *e.g.* Acts XVII 18 τί ἄν θέλοι . . . λέγειν; “what may he wish to say?” (and so Acts VIII 31 and XXVI 29)

b) *Dependent Use.* In Classical Attic the optative was used in conditional, final and temporal clauses *i.e.* after the conjunctions εἰ, ἐάν, ἵνα(μὴ), ὅπως(μὴ), ὅτε and others. The traditional rule, however, which says that the head clause must contain then a past indicative, has never been stringent.¹ This means that the optative and subjunctive moods were here likewise in mutual opposition (*e.g.* potential *vs.* final), just as in head clauses, and not in complementary distribution as the rule might suggest. In N.T. Greek, however, the subjunctive tended to supplant the optative in dependent clauses.

Conditional εἰ plus optative is found: Acts XX 16, XXIV 19, XXVII 39; 1 Cor. XIV 10, XV 37; 1 Pet. III 14 and 17. Only in Acts XXIV 19 the optative is part of a conditional sentence containing a past indicative: οὕς ἔδει ἐπὶ σοῦ παρῆναι . . . εἴ τι ἔχοιεν πρὸς ἐμέ.

N.T. instances of optatives used after temporal conjunctions are lacking, whereas the instances of final conjunctions plus optative are doubtful from the textual point of view *e.g.* Mark XII 2 (⌘ only). Turner mentions also παραδοῖ in Mk. XIV 10 and 11 (*v.l.* -δω) and γνοῖ in Mk. IX 30 (*v.l.* γνω), but Blass-Debrunner hold these forms to be subjunctives formed on the analogy of subjunctives like δουλοῖ, which seems more likely as the optatives were either δοίην (1 Th. V 15 D*) or δώην (*e.g.* Eph. I 17),² and γνοίην or γνώην.

In Classical Attic the optative was also used in indirect state-

¹ Schwyzer, *o.c.*, II, pp. 333-334. Cf. also the instances in W. Schmid, *Der Atticismus in seinen Hauptvertretern*, Stuttgart 1887-97, I p. 243, III p. 87, IV pp. 90-91.

² Resp. *o.c.*, p. 129 and *o.c.*, *par.* 95, 2.

ments and questions *e.g.* Xenophon *Anab.* VI 6, 25 ὁ Κλέανδρος εἶπεν ὅτι Δέξιππον μὲν οὐκ ἐπαινοίη εἰ ταῦτα πεποιηκώς εἴη. Here it was likewise not obligatory that the verb of the head clause should be a historical indicative; especially in indirect questions the potential flavour of the optative is obvious. According to Schwyzer it is correct to use the term “oblique optative”, but only when the optative replaces the indicative which would be present in the direct statement.¹ In the N.T. this oblique usage is restricted to indirect questions *e.g.* Luke I 62 ἐνένευον δὲ τῷ πατρὶ αὐτοῦ τὸ τί ἂν θέλοι καλεῖσθαι αὐτό. Due to the low frequency of the optatives in the N.T. we shall quote in the following description some instances from Classical Attic. This will not endanger our synchronic method, as the Atticistic optative was artificial and imitating Classical usage.

II.2.2.3.2. *The Value of the Optative.* Of the various moods it is the subjunctive to which the optative seems to bear the closest semantic likeness. For that reason we shall start our description by trying to mark off these two from one another.²

a) *Independent Uses.* The optative which expresses a *wish* that can be fulfilled, or, at least, is conceived of as such, *e.g.* λούοιμεν seems to differ from the adhortative subjunctive λούωμεν by the fact that it merely denotes the addresser's wish that a relation person—action may exist, whereas the subjunctive brings out that the addresser urges or expects the person (here: himself and the addressee(s) to actualize the action referred to.

As against the second independent use of the optative, the *potential* optative (with or without ἄν),³ which *assumes* that a relation person—action may exist, the subjunctive does not express potentiality but expectance (in head clauses frequently so in Homer, not in the N.T.).

We hold it possible that both these aspects, the pure wish and the potential aspect, which according to Schwyzer make up the

¹ *o.c.*, II, p. 333.

² For a detailed discussion of the optative and subjunctive moods mainly in Homeric Greek and Sanskrit we refer to J. Gonda, *The Character of the Indo-European Moods*, Wiesbaden 1956. Cf. Schwyzer, *o.c.* II, p. 319 ss. Where we shall use the words “eventual” and “eventually” in the following pages we do not mean “ultimate(ly)”, but want to convey what can otherwise be worded as “if any”, “if by any chance”.

³ Schwyzer, *o.c.*, II, p. 324.

total value of this mood, are contextual variants of one another, and that, most likely, differences in intonation played here an important rôle. A verb like εἴθου "he may come", when combined with a wishing intonation, resulted, in our opinion, in what we are wont to call the aspect of the pure wish: "may he come". Although nothing is known about such an intonation in Greek, we think it precarious, in view of the situation in many other languages, to assume that it did not exist there, and as a consequence we do not question the unity of the optative category, which otherwise would be problematic. The wish does not, in our opinion, affect the assumptive attitude implied by the potential optative in any way, because a wish that can be fulfilled implies the assumption of something possible.¹ In the same way, we believe, the use of the imperfect or aor. ind. in unattained wishes may have been characterized by intonation *vs.* non-wishes, although the former were usually headed by εἴθε or ὅφελον (see *par.* II.2.2.9.2).

The common optative value might then be defined as "modus eventualis", the essence of which would be the addresser's assumption that a relation person—action may exist. The indicative assumes the relation either as existing or as eventual, whereas the subjunctive and imperative imply an urging or expecting attitude on the part of the addresser, which neither indicative nor optative express.

b) *Dependent Uses.* The use of the optative after conjunctions that express some uncertainty like εἰ, ὅπως, is understandable in view of its value of eventuality. It was used in such sentences *by the side of* the subjunctive, because it has never been a strict rule, as is often assumed, that the optative could occur in dependent clauses only if the head clause contained a historical verb tense.² Likewise, the occurrence of the subjunctive was not restricted to dependent clauses headed by non-historical tenses. As Schwyzer has shown, the optative had after these conjunctions its eventual-potential value, too, in contradistinction to the subjunctive which expressed expectance, *e.g.* Xenophon *Anab.* II 4, 3 οὐκ ἐπιστάμεθα ὅτι βασιλεὺς ἡμῶς ἀπολέσαι ἂν περὶ παντὸς ποιήσαιτο, ἵνα . . . φόβος εἴη and Ael. Aristides *In Sar.* p. 352 (*ed.* Keil) l. 12 εἴ . . . ἀφέλοι . . . l. 13 ἔστιν. The occurrence of both these moods in dependent clauses

¹ Gonda, *o.c.* p. 52: potential or wish: mainly a question of context.

² Schwyzer, *o.c.*, II, pp. 333-334; also p. 326.

is therefore not conditioned by the nature of the conjunctions or the verbs which appear in the context.

In the same way the "oblique optative" in indirect speech could occur both after historical and after non-historical tenses in the head clause, the latter *e.g.* in [Demosth.] 59, 5 νῦν . . . ὁμολογεῖται ὥς τὰ βέλτιστα εἰπὼν ἄδικα πάθοι. As to reported speech there were two possibilities in Greek: it could either be reproduced objectively, without any change in the moods, or it was reported subjectively, when by a change to the optative mood the reporting speaker to some degree involved his own point of view. In this way he expressed his reserve with regard to the utterance reported, refusing as it were to be responsible for it by making things positively "eventual". In indirect questions the uncertainty is still greater as the reported utterance as such is not affirmative. That may be why in the N.T. the oblique optative is restricted to such questions, except perhaps in Acts XXV 16.

According to school grammar ὅτε plus optative would refer to a repeated action *e.g.* ὅτε παιδεύοι, ὅτε παιδεύσαι "whenever he educated", whereas ὅτε plus indicative would indicate a specific event. Schwyzer, however, also doubts the existence of this iterative optative; according to him the iterative aspect depends rather on the context, especially when it contains words like ἐκαστοτε.¹ Moreover, it would be natural if this iterative optative were always a durative optative, but it is precisely the aorist optative which is most frequent after conjunctions like ὅτε, εἰ, *etc.* As has been said the optative is no longer used in the N.T. after temporal conjunctions.

Our conclusion may be that "eventual/potential" is a description of the optative value which covers all the instances, and consequently that there is no need for further distinctions like "final", "oblique" or "iterative". The wish is probably a contextual variant of this value depending on some special intonation, and on particles of wish like ὥς, μὴ, *etc.*: ἔλθοι is either "may he come" or "he may come".²

II.2.2.4. *Value of the Subjunctive Mood.*

a) *Independent Use.* In a sentence like Mk. XII 7 δεῦτε ἀποκτείνωμεν αὐτόν the speaker by using the subjunctive urges the persons

¹ Schwyzer, *o.c.*, II, pp. 335-336.

² Compare the ambivalence of "may" in these English phrases, which is however, connected with the difference in word order.

referred to (here: himself and others) to actualize the relation with the action. That is, of course, with the action as he sees it *i.e.* as progressing (durative), with indifference as to progression (aoristic), as expected (futural), or as completed (perfective). This implies that a durative subjunctive like ἐργαζώμεθα may mean "let us work continuously" in a situation where a relation person—action exists, but—according to the speaker—not a relation with an action seen in progression. In ordinary language this means that we are already working, but that the speaker thinks we are not working on. It can, however, also mean "let us work immediately" when the context makes it clear that we are not yet at work (*cf. par. II.2.2.5*).

The majority of these adhortatives are 1st person singulars or plurals, but in the Hellenistic period instances occur of 2nd and 3rd persons *e.g.* Hermas *Sim.* VIII 1, 4 (P. Mich.) ἄφες ἰδῆς, and Epictetus I 15, 7 ἄφες ἀνθήσῃ. When adhortatives occur in questions, the speaker asks or doubts whether something should be done. Traditionally this usage bears the name of the "*dubitative subjunctive*", though in our opinion there is no essential difference here: the dubitative is merely an adhortative used in a question *e.g.* Matt. XI 3 σὺ εἰ ὁ ἐρχόμενος ἢ ἕτερον προσδοκῶμεν; and Matt. XXVI 54 πῶς οὖν πληρωθῶσιν αἱ γραφαὶ ὅτι οὕτως δεῖ γενέσθαι;¹ The adhortative can also be negated, by μὴ, or more emphatically by οὐ μὴ, and is then traditionally called the "*prohibitive subjunctive*". Here again there is no essential difference with the other adhortatives: 1 John III 18 μὴ ἀγαπῶμεν λόγῳ, Matt. VI 13 μὴ εἰσενέγκῃς ἡμᾶς εἰς πειρασμόν.

b) *Dependent Use.* The subjunctive is used with all kinds of conjunctions whose meanings have an element of expectance, intention, futurity, or "not yet": ἵνα and ὅπως "that" (final), ὥς "so that" (consecutive), εἰ and ἐάν "if", ὅταν "whenever", ἄχρις ἂν and ἄχρις οὗ "until". In non-literary Koine Greek the subjunctive has almost completely driven out the optative, which could also be used here to indicate possible relations between person and action. As the opposition subjunctive *vs.* optative was now no longer present in these constructions, the subjunctive

¹*Cf.* Schwyzer, *o.c.* II, *p.* 318. The dubitative can also be seen as a prospective subj. occurring in a question (see Schwyzer, *o.c.*, II, *p.* 311); for the rest this prospective aspect (frequent in head clauses in Homer) is now restricted to subordinate clauses.

could loose here its typical urging value, for instance in the consecutive, or better: epexegetic use in Apc. XIII 13 ποιῶ σημεῖα μεγάλα ἵνα καὶ πῦρ ποιῇ . . . καταβαίνειν "and he does great signs, so that (namely that) he makes even fire to come down".

The subjunctive is also used with relative pronouns and ἄν combined, meaning "whoever" e.g. Matt. V 22 ὃς δ' ἂν εἴπῃ· μωρέ, etc. A difference in value between this usage and that of the future indicative with ὅστις as in Matt. V 41 ὅστις σε ἀγγαρεύσει μίλιον ἓν, ὕπαγε μετ' αὐτοῦ δύο, cannot be detected. Thirdly the subjunctive is used with verbs of fear such as φοβοῦμαι μὴ "I fear that", φοβοῦμαι μὴ οὐ "I fear that not":

Acts XXVII 17 φοβούμενοί τε μὴ εἰς τὴν Σύρτιν ἐκπέσωσιν.

Xenophon *Oec.* XVI 6 φοβούμενον μὴ οὐ γινῶ. (no certain N.T. instance: Matt. XXV 9 μήποτε οὐκ ἀρκέσῃ (X) cf. 1 Macc. III 30 εὐλαβήθη μὴ οὐκ ἔχῃ).

In all these kinds of dependent use of the subjunctive it is not necessarily the attitude of the speaker that is expressed by the verb, it may also be the attitude of the person referred to by the finite verb present in the so-called head clause. This attitude, as appears clearly from the use of the subjunctive with φοβοῦμαι, is not only urging but comprises all kinds and shades of expectance, intention, fear, and the like, with regard to a really existing or not (yet) existing relation person—action.¹ This value was to a high degree, but not wholly, identical to that of a future indicative (cf. par. II.2.3.3.6), especially when used after οὐ μὴ, a usage which in the N.T. almost wholly supplanted that of οὐ μὴ with fut.ind. Phonetic change also tended to efface the differences in *form* between the aorist subjunctive and future indicative: the members of the pairs παιδεύσης—παιδεύσεις and παιδεύσῃ—παιδεύσει became homophonous when c. 150 A.D. η [e] and ει, ι [i] coincided in one phoneme. It need not therefore surprise that in the IVth century Codex Alexandrinus the future indicatives and aorist subjunctives are no longer distinguished; we have counted in this ms.(Apc.) 14 futures that are wholly used as subjunctives, for instance with the conjunction ἵνα.

In conclusion we may say that the value of the subjunctive implies an urging-expecting attitude on the side of the speaker or the subject of the sentence with regard to the relation person—

¹ Cf. J. Gonda, *o.c.*, p. 70.

action. As such it is almost entirely in complementary distribution with the imperative mood (see *par.* 11.2.2.5). Such an urging attitude is never expressed by the optative, the pure wish and potentiality being peculiar to the value of the latter. Although in certain dependent clauses the subjunctive and optative values may seem practically identical, there is no reason to believe that these categories were not in direct opposition to each other. Only in later times the two were sometimes confused, due to phonetic change, e.g. Ruth I 9 εὔροιτε B; ευρηται A (i.e. εὔρητε).

11.2.2.5. *Value of the Imperative Mood.* It is the value of the imperative to express that the *speaker urges* the *relation person—action* to *exist*. Each of the elements which make up this definition needs some remarks:

The “*speaker*” is either a quoted speaker or the person who is actually speaking or writing to us. The former case is found e.g. in Plato *Crito* 50c where Socrates says about the laws: ἴσως ἂν εἴποιεν οἱ ὦ Σώκρατες, μὴ θαύμαζε τὰ λεγόμενα ἀλλ’ ἀποκρίνου and Matt. XV 4 ὁ γὰρ θεὸς εἶπεν τίμα τὸν πατέρα καὶ τὴν μητέρα. The laws and God are in these situations the original speakers whose urging attitude is expressed by the imperatives. The imperative is therefore always tightly connected with the speech situation. We know of only one instance where it is unclear whether it is actually the speaker only who “urges”: Hdt. I 89 νῦν οὖν ποίησον ὧδε, εἴ τοι ἀρέσκει τὰ ἐγὼ λέγω. κάτισον τῶν δορυφόρων ἐπὶ πάσῃσι τῇσι πύλῃσι φυλάκους οἱ λεγόντων πρὸς τοὺς ἐκφέροντας τὰ χρήματα *etc.* If in this passage the imperative λεγόντων indicates as usually, that the speaker is urging, we should translate: “You place . . . guards whom *I want* to say to anyone who, *etc.*” However, we may also imagine the addressee to urge his guards; in which case we should have to translate: “You place . . . guards whom you order to say to anyone *etc.*” In this way the value would be approximately identical to that of a final subjunctive: κάτισον . . . φυλάκους ἵνα λέγωσιν *etc.* Possibly we have here a transition between imperative and subjunctive, but in view of its incidental if not unique occurrence we believe we need not alter our above definition of the imperative value (*cf.* Euripides *Hec.* 225 quoted below).

The *urging attitude* is not necessarily that of one who orders or commands, it may also be requesting or even concessive e.g. in the Lord’s Prayer Matt. VI 11 τὸν ἄρτον ἡμῶν τὸν ἐπιούσιον δὸς ἡμῖν σήμερον and 2 Cor. XII 16 ἔστω δέ “be this as it may”; condi-

tional in John II 19 λύσατε τὸν ναὸν τοῦτον καὶ ἐν τρισὶν ἡμέραις ἐγερῶ αὐτόν. The imperative may even occur in questions: Eur. *Hec.* 225 οἶσθ' οὖν δ' ὁρᾷσον; "do you know what you should do?", and similarly Eur. *Heraclid.* 451; Soph. *Oed. Rex* 543. In these contexts the persons who ask the questions give the answers themselves and do so by using imperatives again.

The *relation person—action is urged to exist*. This implies either that the relation does not exist in reality but should arise, or that it exists already and should continue.

When an imperative is negated the implication is that the relation person-action should either not arise or not continue. A durative imperative which orders a progressing action instead of the action present in the given situation *may* also be seen as referring to an action which the speaker wants to arise, rather than to go on. Although the action as such existed, it did not exist as the speaker wanted it to be. Further differences between the durative and aoristic imperatives will be discussed together with the oppositions of the subsystems (*par.* II.2.3.3.4).

To a considerable extent the uses of the imperative and subjunctive moods were complementary: self-adhortations were worded by adhortative subjunctives, adhortations to others mainly by imperatives. Both categories could be negated, except for the aorist imperative, instead of which the negated aorist subjunctive (or: prohibitive subjunctive) was used *e.g.* Matt. V 17 μὴ νομίσητε ὅτι *etc.* For the rest, the imperatives were restricted to non-interrogative head clauses, the subjunctives to interrogative head clauses, and to subordinate clauses.

II.2.2.6. *Value of the Infinitive Mood.*

As opposed to the categories of person the infinitive is unmarked, being non-committal as to person, but as we have pointed out, its participation of the opposition of voice implies an unspecified person with regard to whom the direction of the action may differ *e.g.* in παιδεύειν *vs.* παιδεύεσθαι. Moreover, the character of the relation person—action as seen by the speaker is unspecified, too: the value of the infinitive is neutral both as to person and as to mood. Accordingly it can be contextually used with the value of one of the other moods: as an imperative in Luke IX 3 μὴτε ἀνὰ δύο χιτῶνας ἔχειν (infinitivus pro imperativo), as a subjunctive in Luke IX 2 ἀπέστειλεν αὐτοὺς κηρύσσειν (infinitivus finalis *i.e.* ἵνα κηρύσσωσιν), as an indicative in the various accusative (nomi-

native)- plus-infinitive constructions: Rom. II 19 πέποιθάς τε σεαυτὸν ὁδηγὸν εἶναι *i.e.* ὅτι ὁδηγὸς εἶ (in Latin also when independent of a finite verb: the historical inf.). The infinitive is, however, different from the other moods in its syntactical combinability: it may be combined with oblique cases, adverbs and prepositional groups as the latter, but only under specific circumstances with a nominative, namely in the nominative-plus-infinitive constructions.

Moreover, it can regularly be connected with finite verbs, see Luke IX 2 and Rom. II 19 quoted above, whereas a combination of two finite verbs is exceptional, *e.g.* Matt. XIII 28 θέλεις . . . συλλέξωμεν; "do you want us to gather it?"

11.2.2.7. *The Value of the Participle.* The participles are transpositions from the verb system to that of the adjectives, but the transposition is not a complete one. Several characteristics of the participle indicate that it holds a position somewhere in between both these systems. With the verbs it shares the oppositions of voice and view, as well as the syntactical combinability with the oblique cases, adjectival adverbs and prepositional groups, *e.g.* John V 37 ὁ πέμψας με πατήρ (*cf.* ὁ πατήρ ἔπεμψέν με). On the other hand the participle does not take part in a productive way in the categories of comparison, which are characteristic of the adjective system. When participles incidentally do take part in these categories, they often have a special aspect of meaning, for instance εἰκώς, the participle of *ἔοικα*, has a comparative when the meaning is "probable", hence εἰκότερον "more probable" (Antiphon II γ 5), but not so when it simply means "seeming". Only the participles of middle perfects, and those of perfects which have no middle voice, took freely part in the adverbial category, *e.g.* πεπεισμένως "from conviction, confidently", κεκμηκότως "wearily" (Sch. Soph. *El.* 164). Adverbs of other participles are rare: μαχομένως "self-contradictorily" (Strabo II 1, 40).

As the participle does also take part in the categories of voice, it implies, just as the infinitive, a relation between the action referred to and an unspecified person. The speaker's attitude towards this relation is, however, not neutral, as with the infinitive mood, but assumptive or intentional. This latter aspect, however, may as well be considered as the contextual aspect of future time of the (durative or aorist) participles, because these are fundamentally indifferent with regard to time. According to context their

value is past, present or futural, or rather preceding, contemporary or subsequent as compared with the time expressed by the finite verb in the sentence. The obsolete future participle had, of course, always the value of future time, just as the other moods of the futural subsystem.

The semantic aspects traditionally assigned to the participle, the adversative-concessive, temporal, causal and conditional aspects, naturally come within the factual-potential value as correlated with the indicative mood (more particularly: with the timeless indicative). Since we do not know of any instances of participles used "as an imperative", we believe that the proper value of the participle category is not wholly indifferent or unmarked as opposed to that of the other moods, but consider it to be more akin to that of the indicative, than to that of the infinitive mood, and consequently we consider it an (incomplete) transposition of the former.

11.2.2.8. *Oppositions between the Different Moods.* As we have seen, the infinitive is wholly neutral as to mood (*par.* 11.2.2.6), whereas the participle is in all probability a transposition of the indicative (*par.* 11.2.2.7). It remains then to recapitulate the mutual oppositions of the indicative, optative, subjunctive and imperative moods.

The indicative and the optative seem more closely related on the one hand, the subjunctive and the imperative on the other. By using the indicative the speaker assumes the relation person—action as existing or eventually existing, by using the optative always as eventually or possibly existing (*par.* 11.2.2.3.2). The latter, therefore, is marked as opposed to the former.

The subjunctive indicates that the addresser or the subject of the head clause either urges or expects the relation person—action to exist; with the imperative it is always the addresser who is the one that urges this relation to exist. The latter may therefore be marked as opposed to the subjunctive, but in view of the almost complete syntactical complementarity of both moods (imperative: 2nd and 3rd person and only in head clauses, subjunctive: 1st person in head clauses, all persons in dependent clauses), such an opposition is doubtful. All these conclusions may be combined in the following scheme:

Marked		Unmarked	Marked	
Assumptive:		Assumptive or	Urging:	
unmarked as exist- ing or eventual	marked as even- tual	Urging	(marked?) urged by addresser	(unmarked?) urged by addresser or others
indicative participle	optative	infinitive	imperative	subjunctive

11.2.2.9. *Opposition between Non-Past and Past Indicatives.*

11.2.2.9.1. *Non-Past or Present Indicative.* The non-past indicative of the subsystem which we have taken for example, is traditionally called the *present* indicative. In reality, however, it is a *timeless* or *omnitemporal* indicative, the well known phenomena of the historical present and the future present being there to show us that expressing the present time is only one of the functions that this tense may perform. A single instance of both may suffice:

Historical Present: John XIII 1-8, the story of the feet washing:

1. ἡγάπησεν . . . 4. ἐγείρεται . . . τίθησιν . . . διέζωσεν. 5. βάλλει . . . ἤρξατο . . . 6. ἔρχεται . . . λέγει . . . 7. ἀπεκρίθη . . . εἶπεν . . . 8. λέγει . . . ἀπεκρίθη . . .

Future Present: Mark IX 31 καὶ ἔλεγεν αὐτοῖς ὅτι ὁ υἱὸς τοῦ ἀνθρώπου παραδίδοται εἰς χεῖρας ἀνθρώπων καὶ ἀποκτενοῦσιν αὐτόν.

It entirely depends on the context whether we are to interpret such a present indicative as referring to present, past or future time, or as a timeless remark of general purport, like Matt. V 45 τὸν ἥλιον αὐτοῦ ἀνατέλλει "God makes His sun rise (every day)"; the same holds good of the perfect indicative. For these reasons we consider the timeless indicatives *i.e.* the present and perfect indicatives as unmarked in opposition to the historical and future ones (imperfect, aorist, future, pluperfect, and future perfect).

11.2.2.9.2. *Past Indicative in Unreal Conditions.* By using past indicatives (imperfect, aorist, pluperfect) the speaker assumes a relation between person and action as existing in the past *i.e.* before the moment when he is speaking resp. writing.

We shall have to discuss now whether the mood value of the indicative (*par.* 11.2.2.2) is influenced by the fact that it occurs in these verbs in combination with the value of past time, because it seems at first sight to contradict entirely the value of the historical indicatives in the so-called "unreal conditional sentences", which,

as is well known, conflict either with the present or with the past *reality* e.g. John XVIII 36 εἰ ἐκ τοῦ κόσμου τούτου ἦν ἡ βασιλεία ἡ ἐμὴ, οἱ ὑπηρέται δὲν οἱ ἐμοὶ ἠγωνίζοντο. In view of the fact that they may be considered either as factual or as potential (see *par.* II.2.2.2), the indicatives as such do not refer to *non-existent* facts but to the (possible) existence of a relation person-action which is mentioned *as* a condition, and to the (possible) existence of another relation *as* the result of this condition: In both cases the (possible) existence of the relation can of course be expressed by the indicative only, while it is the conjunction εἰ which conveys the conditional notion, and the particle δὲν which makes it clear that the other half of the sentence depends on this condition; the latter was, however, not obligatory in Koine Greek and could be omitted e.g. John IX 33 εἰ μὴ ἦν οὗτος παρὰ θεοῦ οὐκ ἠδύνατο ποιεῖν οὐδέν. The non-validity, however, of the relation person—action for the *present time* is indicated by the use of *past* indicatives, which depends in our opinion on the fact that a historical indicative is the only one which can indicate that a relation is not present, unreal or non-existent in the speech situation. The value of past time has in such constructions the variant aspect of “*not now*”. It is true that the future indicatives likewise refer to relations that are strictly spoken not present, and as such unreal, but these relations can at least be expected, and are for that reason already invested with a certain amount of reality.

There are also unreal conditions which conflict with the reality as it was in the *past*. It is often stated in our grammars that in this case the aorist is used, whereas the imperfect would be restricted to conditions that are contrary to the present reality,¹ but this is true neither for Classical Attic nor for Koine Greek. The choice of the tenses is here and elsewhere a matter of “aspect” or as we prefer to say, of “view on the action” (*par.* II.2.3.3.1), and therefore it is only the category of past time which indicates that the condition is contrary to reality. Seemingly the indicative mood has in these conditions a value which contradicts our previous definition. We might remark of course that the indicative only *assumes* a relation person—action as (possibly) existing and that an assumption is either correct or wrong: unreal conditions would then fall under the latter heading. That does, however, not explain why the *past*

¹ Schwyzler, *o.c.*, II, pp. 347-348; M. Zerwick, *Biblical Greek*, Rome 1963, *par.* 314-317.

indicative is used in unreal conditions that conflict with the *present* or with the *past* reality. We would expect in the latter case a verb tense which would be restricted to that usage, in other words we should like to see a proportionality:

conflict with present : conflict with past = past indicative : ?

In Latin this proportion is present between the imperfect and pluperfect *subjunctives*, evidently because the Latin pluperfect indicative is a pro-preterite tense expressing a relation person—action which took place before another past moment mentioned or implied by the context. The Latin subjunctive mood expresses the unreal element in the condition, while the two past varieties of subjunctive (imperfect subj. and plupf. subj.) indicate the difference in time. Greek, however, did not possess such a pro-preterite *tense*, the pluperfect having a different value. In Greek it is the imperfects and aorists that could contextually have such a pro-preterite *aspect* e.g. in Apc. XXI, 1 καὶ εἶδον οὐρανὸν καινὸν καὶ γῆν καινὴν· ὁ γὰρ πρῶτος οὐ(ρα)νὸς καὶ ἡ πρώτη γῆ ἀπῆλθαν, and John IX 18 (the blind man has been healed): οὐκ ἐπίστευσαν οὖν οἱ Ἰουδαῖοι περὶ αὐτοῦ ὅτι ἦν τυφλὸς καὶ ἀνέβλεψεν, “they did not believe that he *had* been blind”. In this passage the historical tenses ἦν and ἀνέβλεψεν refer of course to the past from the point of view of the author, but also from that of the Jews mentioned in the text *i.e.* of the subject of the head clause. In other words, these verbs refer to a moment lying before the past time implied by ἐπίστευσαν.

In unreal conditions we might say then, that the pro-preterite aspect both of the imperfect and of the aorist indicative implies a contextual emphasis on the negative: “which was not *then* the case”, in order to express that the speaker’s assumption conflicts with the past reality referred to by the context. *Mutatis mutandis* the same holds good of impossible or unrealizable wishes, *i.e.* wishes of which the speaker himself considers the fulfilment impossible. They are expressed in the non-literary Koine by the fossilized participle ὄφελον plus historical indicative e.g. Apc. III 15 (mss.) ὄφελον ψυχρὸς ἦς ἢ ζεστός (absent in A) cf. the preceding (A) οἶδά σου τὰ ἔργα ὅτι οὔτε ψυχρὸς εἶ οὔτε ζεστός, and also 1 Cor. IV 8 ὄφελον ἐβασιλεύσατε. The fact that there is here a wish is expressed by ὄφελον, while its content is expressed by the indicative; the past tense brings out that this content is contrary to the past or present situation.

11.2.2.9.3. *Value of Past Time.* Within this value a distinction

should be made between a) the absolute past, and b) the relative past.

II.2.2.9.3.1. *Absolute Past.* The relation between person and action is here assumed to have existed in the past reckoned from the moment of speaking or writing *e.g.* Apc. I 9 ἐγενόμην ἐν τῇ νήσῳ τῇ καλουμένῃ Πάτμῳ.¹ A complication is furnished by reported speech, because in that case there are two, sometimes more than two successive speakers, and as a consequence two moments of speaking may be relevant. Compare Acts II 13 ἔλεγον (reckoned from the time of the author, who is the reporting speaker) ὅτι γλεύκους μεμεστωμένοι εἰσὶν (time of the original speakers), with Mark VIII 16 D διελογίζοντο ὅτι ἄρτους οὐκ εἶχαν, where both verbs express the past as reckoned from the present time of the author. In the N.T. moreover, it is not always a *verbum dicendi* that introduces the oratio indirecta; at times this is also done by a verb of perception, *e.g.* in Matt. II 22 ἀκούσας δὲ ὅτι Ἀρχέλαος βασιλεύει . . . ἐφοβήθη and John VI 24 εἶδεν ὁ ὄχλος ὅτι Ἰησοῦς οὐκ ἔστιν ἐκεῖ.

In letters the writer may consider as the moment of speaking either the time when he writes or the time when the letter is read; Acts XXIII 30 ἐπεμψα πρὸς σέ is reckoned from the moment of reading.

The value of absolute past can according to context imply that

a) the relation person—action is seen as existent in the past but not in the present *e.g.* in unreal conditions (*par.* II.2.2.9.2);

b) the relation person—action is seen as existent in the past with the implication (or rather: without denying) that this is still the case in the present.

The latter aspect *b)* is present when a personal opinion is expressed in a polite, careful or modest way *e.g.* Acts XXV 22 where King Agrippa addresses himself to the new Roman procurator Festus:

¹ In view of the fact that the oppositions durative *vs.* aoristic and non-past *vs.* past are, in the indicative category, correlated with only three different forms (pres. ind., imperfect and aor. ind.), it will be evident that one of these three has to be the neutral member, either in the opposition of “view” (*i.e.* aspect: dur. *vs.* aor.) or in the opposition of time. J. Holt, *Etudes d’aspect*, Acta Jutlandica XV-2, Copenhagen 1943, p. 44, holds the opinion that the aor. ind., although it usually refers to past time is fundamentally “amorphe” with regard to time, which would explain the phenomenon of the gnomic aorist. This latter point is weakened, we think, by the fact that there are also gnomic futures, and as it can be shown that the pres. ind. is indifferent with regard to the opposition durative/aoristic (see *par.* II.2.3.3.7), we hold the view that the aor. ind. as opposed to the pres. ind. is correlated with the value of past time.

ἐβουλόμην καὶ αὐτὸς τοῦ ἀνθρώπου (St. Paul) ἀκοῦσαι. Of course he still wants to hear him, but he says so not by using the blunt βούλομαι "I want to hear him", but the courteous ἐβουλόμην "I should like . . ."; this is a past tense but from the context it is clear that it does not refer to the past *only*.

Akin to this usage are the past tenses which express an obligation, a possibility, and the like. They can have the same aspect of modesty or carefulness as described above *e.g.* in Col. III 18 αἱ γυναῖκες ὑποτάσσεσθε τοῖς ἀνδράσιν ὡς ἀνῆκεν ἐν Κυρίῳ, but this aspect can also be absent *e.g.* in Acts XXII 22 where a riotous mass is yelling αἶρε ἀπὸ τῆς γῆς τὸν τοιοῦτον (St. Paul), οὐ γὰρ καθῆκεν αὐτὸν ζῆν. However, such verbs are also used in the past tense to bring out that actually the obligation *etc.* is no longer present because its fulfilment is not possible any more *e.g.* Matt. XXVI 9 ἐδύνατο γὰρ τοῦτο πραθῆναι (*scil.* the oil that was then used to anoint Jesus) πολλοῦ καὶ δοθῆναι πτωχοῖς.

Aspect b) is also present in the "gnomic" aorist which expresses a general truth in proverbs, aphorisms, and the like. The reason why a past tense is used here, is sometimes to be found in a postulated original context like a fable or some other story in which the past tense was necessary: from such a story the gnomic aorist would then have been isolated. We hold the opinion that this may be true from the historical point of view, but that the past tense implies here also: "which is still (or: always) the case" *e.g.* Hesiod, *Op.* 218 παθὼν δέ τε νήπιος ἔγνω, and Plato, *Critias* 108c ἀθυμοῦντες ἄνδρες οὐπω τροπαῖον ἔστησαν. (No N.T. instances). The gnomic aorist is, however, only one of the means of expressing a general truth; this is also a function of the present durative and the future indicative.¹

II.2.2.9.3.2. *Relative Past.* The relation person—action is assumed as existing in a relative past *i.e.* at a moment anterior to the time referred to by a verb in the context, or by other words. If this moment is anterior to a past event we have the so-called pro-preterite aspect *e.g.* John IX 18 οὐκ ἐπίστευσαν . . . ὅτι ἦν τυφλὸς "that he *had been* blind", not: "that he *was* blind" (*cf.* the Latin *plu-*

¹ According to B. A. van Groningen, *In the Grip of the Past*, Leyden 1953, pp. 19-20, the gnomic aorist is preferred to express general truths because "objective certainty can be found only there; for the future is obviously a matter of pure expectation or supposition, the present a moving transition which does not add to itself, but to the past. Only the past is sure and final . . ."

perfect). It may also be anterior to a future moment (*cf.* the Latin *futurum exactum*) *e.g.* 1 Cor. VII 28 μὴ ζητεῖ γυναῖκα· ἐὰν δὲ καὶ γαμήσῃς οὐχ ἡμαρτες “if you will marry you will not have committed a sin”, and Hermas, M. III 2 ἐὰν ψευδὲς ἀποδώσωσιν ἐμίαναν. Older examples are: Hom. Δ 160-161 εἴ... οὐκ ἐτέλεσσεν, ἔκ τε καὶ ὀψὲ τελεῖ, ... ἀπέτισαν, and Hdt. VIII 102 ἦν καταστρέφεται... οἱ γὰρ σοὶ δοῦλοι κατεργάσαντο “will have done it”.

It is difficult to decide whether a past indicative can also refer to a future moment as seen from the past, as Blass-Debrunner maintain, quoting Mark XIV 1 ἦν δὲ τὸ πάσχα καὶ τὰ ἄζυμα μετὰ δύο ἡμέρας “the Passover *etc.* would be two days later”, but it seems quite possible that ἦν refers here to the absolute past, namely from St. Mark’s point of view: μετὰ δύο ἡμέρας implies then “reckoned from the day of which we are now speaking”. Blass-Debrunner’s second instance, Luke XXIII 54 καὶ σάββατον ἐπέφωσκεν, merely means “the Sabbath was (just) dawning”.¹

II 2.2.9.4. *Opposition Non-Past vs. Past Indicative.* As opposed to the omnitemporal present indicative we consider the past tenses as marked, but Ruipérez holds a different view. He takes the past tenses as the unmarked members of the opposition adding some instances of “*praeterita pro praesente*” and “*pro futuro*”,² but these can be explained either as gnomic or as relative past tenses *e.g.* Hom A 218, Γ 23, Δ 160; Hdt. II 47 and VIII 102 (see above). As we have shown that the value of the past tenses always *includes* past time, whereas the present indicative is absolutely non-committal as to time, we hold the former to be marked.

II.2.2.9.5. *Opposition to the Future Indicatives.* Two subsystems comprise future indicatives namely the non-perfective futural and the perfective futural sections. The temporal value of futurity, however, is there correlated not only with the indicative but with the remaining moods as well, there are *e.g.* futural infinitives. The position of the futural categories is therefore different from that of the past tenses, which are only part of a subsystem. We shall for that reason discuss in this paragraph the future indicative, but deal with the other futural moods later on.

The futural value has two aspects: 1) *absolute future*, reckoned

¹ *o.c.*, *par.* 323, 4.

² M. Sánchez Ruipérez, *Estructura del sistema de aspectos y tiempos del verbo griego antiguo*, Salamanca 1954, pp. 93, 98.

from the moment of speaking, and 2), the *relative future* which is reckoned from the time indicated by another verb, for instance by a past tense *e.g.* Matt. XX 10 ἐνόμισαν ὅτι πλεῖον λήψονται. A separate "past-future" tense did not exist. In Classical Greek the optative and the subjunctive could serve as such, in Koine Greek the subjunctive and the future indicative. A doubtful instance of a past future is ἐφιλονικήσουσιν in the VIth century inscription of the Nubian king Silko (O.G.I.S. 201, 18).¹ As opposed to the present indicative we consider the future as marked: the former may be used to refer to the future, but not conversely *e.g.* Matt. XXVI 2 οἴδατε ὅτι μετὰ δύο ἡμέρας τὸ πάσχα γίνεται.

11.2.2.9.6. *Excursus on Seiler's Theory.* We want to discuss here part of the theory of tenses as conceived of by Seiler for Modern Greek, because it is sometimes applied to older stages of Greek as well, on the assumption that the Greek verb system has not changed much through the ages. This author makes a distinction between a "*situation actualisée*" in which the orientation towards the moment of speaking is actually relevant, and a "*situation non-actualisée*" in which it is not, because "*le sujet qui fait l'énoncé est capable de retirer, d'éliminer cette référence à son présent . . . les deux situations mentionnées trouvent leurs représentants typiques. Pour la situation non-actualisée, c'est le récit, la narration, le conte . . . surtout populaire. Pour la situation actualisée, c'est le dialogue . . .*"²

One of the instances of such a "*situation non-actualisée*" is the historical present: "*Dans le conte, le présent peut être employé pour désigner les actions du passé.*"³ If Seiler means here that the historical present occurs only in the *situation non-actualisée* we disagree, for historical presents are found in dialogues *e.g.* in that between Oedipus and the herd by whom he had once been taken up as a foundling:

Soph. *Oed. Rex.* 1029 Oedipus ποιμὴν γὰρ ἦσθα ἀπὲι θητεία πλάνης;
1030 Messenger σοῦ δ' ὦ τέκνον σωτὴρ γε τῷ τότ' ἐν
χρόνῳ.

¹ According to S. G. Kapsomenos, *Das Griechische in Ägypten*, Mus. Helv. 10, 1953, p. 252, this verb is not a past fut. but an aorist; he adduces ἐστέψουσιν (*i.e.* ἔσπεψαν) Chronicle of Morea 987 (*ed.* Schmitt) ms. T, and the imperfect ἐγνώριζουσιν (*i.e.* ἐγνώριζον) Digenis Akritas 926 (Escorial-version).

² H. J. Seiler, *L'aspect et le temps dans le verbe néo-grec*, Paris, 1952, p. 22.

³ *o.c.*, pp. 22-23.

1031 Oedipus τί δ' ἄλλος ἴσχοντ' ἐν χεροῖν με
λαμβάνεις;

1032 Messenger ποδῶν ἂν ἄρθρα μαρτυρήσειεν τὰ σά.

One might retort by saying that it is not this dialogue which is *non-actualisé*, but the tragedy as a whole. This, however, brings out only that there is no sharp dividing line between a dialogue and a story: any story teller addresses himself to an audience. Moreover, it is obvious that the above dialogue must have had some features reminding of every day speech. We believe it is precisely this λαμβάνεις which is such a colloquial trait: it gives more life to the picture, the speaker (player, author) does not abstract from the value as Seiler supposes but rather makes a shift from the historical tenses and their psychologically more remote value to the present tense. Any story teller can affirm that using present tenses is one of the techniques of keeping the attention of little children: the story is as it were drawn into the speech situation by the elimination of the past and future times.

Even when a folk tale is told in past tenses we think it not correct to say that there is no reference to the speech situation: the speaker recounts the events as though they happened in a remote past, long before the moment of his performance. In fact the audience may know that the story did never correspond to any historical event at all, but that does not matter. The facts which the indicative assumes *as* existing may be true (*e.g.* in historiography) or not (*e.g.* in lies) or they may be fictitious and then be meant for entertainment only (*e.g.* in literature) or for expressing a general truth (*e.g.* in mythology *etc.*). Of course there are many transitions between these four.

II.2.3. *Values of the Different Subsystems.*

II.2.3.1. *Introduction and Survey.* The verb system as a whole is made up of five sets of recurring categories, like the set or subsystem that we have discussed in the preceding section by way of example. These subsystems, however, do not always comprise the full number of categories as found in our model. Instead of the missing ones the so-called periphrastic constructions have as it were been built into some of the lacunary subsystems. These constructions are word groups consisting either of the verb εἰμί and a participle, or of the verb μέλλω and an infinitive. As we shall discuss these constructions as well as their relations to the verb

system, we shall have to cross the border line of morphology and syntax, because no longer words only but word groups will be dealt with as well.

For the sake of clearness it may be convenient first to display in a scheme the complete number of subsystems in order to bring out where the blanks, if any, are found, and to show how the different subsystems are opposed to each other. Two groups are easily discerned within them: the non-perfective and the perfective categories, both subdivided into non-futurals and futurals. Only the non-futural section of the non-perfectives is again divided, *viz.* into duratives and aoristics. The opposition between the non-perfectives and the perfectives is most clearly visible in the opposition formed by the timeless indicatives which both comprise, that is the present indicative as opposed to the perfect indicative: *λούεις vs. λέλουκας*, which are also the indicatives that happen to be unmarked as opposed to all the others.

The personal form quoted in our scheme will be the 2nd person singular, not the 1st, because the former is directly comparable to the 2nd person imperative. The different participles will be represented by the masc.nom.sg. The categories in brackets were obsolete in Non-Atticistic Koine Greek by the 1st century A.D. The periphrastic constructions will be added in square brackets as far as they fill empty places in the subsystems. The further periphrastic constructions present in Koine Greek constitute categories—if we may use this term—that are not somehow paralleled in the *morphological* verb system, and will for that reason be discussed in a special section.

II.2.3.2. *Non-Perfective vs. Perfective Categories.*

II.2.3.2.1. *Introduction.* As has been stated earlier the five subsystems together contain two indicatives that are timeless in value, namely the present indicative and the perfect indicative *e.g.* *λούεις* (m. *λούει*) and *λέλουκας* (m. *λέλουσαι*). These are completely unmarked, as we shall see, in opposition to the remaining indicative categories, which are the past indicatives and the future indicatives. The two timeless indicatives can therefore be considered as representing the opposition non-perfective *vs.* perfective without the complication caused by the presence of further values. Therefore they seem to us the best starting point for describing the differences in value between the two main groups of the verb system.

		indicative		optative	subjunctive	imperative	infinitive	participle
		non-past	past					
non-perfective	non-futural	παιδεύεις παιδεύει	durative ἐπαίδευες ἐπαίδευσεν	(παιδεύοις) (παιδεύοιο)	παιδεύης παιδεύῃ	παίδευε παιδεύου	παιδεύειν παιδεύεσθαι	παιδεύων παιδευόμενος
			aoristic ἐπαίδευσας (ἐπαίδευσσ) (ἐπαίδευσθης)					
				(παιδεύσεις) (παιδεύσαι) (παιδευθείης)	παιδεύσης (παιδεύσῃ) παιδευθῇς	παίδευσσον (παίδευσαι) παιδευθήτω	παιδεύσαι (παιδεύσασθαι) παιδευθῆναι	παιδεύσας (παιδευσόμενος) παιδευθείς
perfective	fut.	παιδεύσεις (παιδεύσει) (παιδεύῃσει)		(παιδεύσοις) (παιδεύσοιο) (παιδευθήσοιο)			(παιδεύσεν) (παιδεύσεσθαι) (παιδευθήσεσθαι)	(παιδεύσων) (παιδευσόμενος) (παιδευθησόμενος)
	non-fut.	πεπαίδευκας πεπαίδευσαι	ἐπεπαίδευκεις ἐπεπαίδευσσ	[(εἴης + ptc.act./med.)]	[(ῆς + ptc.act./med.)]	— (πεπαίδευσσ)	πεπαίδευνέκαι πεπαίδευσθαι	πεπαίδευκώς πεπαιδευμένος
	fut.	— (πεπαίδευσει)					— (πεπαίδευσσεσθαι)	— (πεπαιδευσόμενος)

Forms. In opposition to the non-perfectives the perfective categories are in general characterized by a special kind of reduplication of the initial consonant of the stem, by the prefix ἐ-, or by modification of the initial vowel, and in the active voice also by an element -κα-(plupf.: -κει-). The details do not concern us here but will be given in the chapter devoted to form description.

11.2.3.2.2. *Non-Perf. Value* The non-perfective categories have the semantic characteristic in common that they do not necessarily refer to the action as a completed action, or, that they do not positively imply a relation between a person and an action after the completion of the latter. According to these definitions we may expect then to find instances of non-perfective tenses that are contextually used as perfectives, whereas the reverse will be impossible. From the N.T. we may cite Luke IX 9 τίς δέ ἐστιν οὗτος περὶ οὗ ἀκούω τοιαῦτα;¹ and from older Greek an instance containing such a present and a perfect indicative together: Plato *Gorgias* 503c: Θεμιστοκλέα οὐκ ἀκούεις ἄνδρα ἀγαθὸν γεγονότα . . . καὶ Περικλέα τουτονὶ τὸν νεωστὶ τετελευτηκότα, οὗ καὶ σὺ ἀκήκοας; Compare Plato *Res Publ.* 377a οὐ μανθάνω, ἔφη, πῶς λέγεις, and Sophocles, *Ant.* 1174 καὶ τίς φονεύει; τίς δ' ὁ κείμενος; λέγε.² Instances of an imperfect with pluperfect value (*i.e.* with the value of a past perfect) and of a future indicative (as opp. to a periphr. cstrn.) with the value of a future perfect might be:

Lysias II 7 εἴ τι ᾔδίκουν "if it was they who *had* done wrong"³

Moeris πεπαύσομαι Ἀττικοί· παύσομαι Ἕλληνες (*p.* 205 Bekker).

Aorists, however, with the exact value of a pluperfect⁴ are not attested. The explanation may be found in the fact that the static value of the pluperfect is more like the durative value of the imperfect, than like the non-durative value of the aorist. All the same the aorist can contextually imply a completed action though somewhat different from that expressed by the perfective verbs. The aorist in this case does not indicate a relation person—action *after* the completion of that action, but with the action *up to and including* its completion. Traditionally this usage has the name of the "confective" or "complexive aorist". An instance is John II 20 τεσσαράκοντα καὶ ἕξ ἔτεσιν οἰκοδομήθη ὁ ναὸς οὗτος. Imperfects and aorists with the contextual value of pro-preterite time should not be

¹ Cf. Blass-Debrunner, *o.c.*, *par.* 322.

² Schwyzler, *o.c.*, II, *pp.* 274-275.

³ Schwyzler, *o.c.*, II, *p.* 276.

⁴ Not to be confused with the aspect of pro-preterite time.

adduced in this connection as the pluperfect itself is not a pro-preterite tense (*par.* II.2.3.4). Neither should instances be quoted of the Hellenistic merging of aorist and perfect, because the essence of this phenomenon is that the perfect indicative is giving up its static value in this period (*par.* II.2.3.2.3).

Of course the non-perfective indicatives may also indicate because of their neutral character that the action has not yet found completion. The duratives in this case are traditionally called *conative* presents and imperfects; they imply that the action is endeavoured or planned. The aorists are then referred to as *ingressive* aorists, and imply only the starting point of the action:

John X 32 διὰ ποῖον αὐτῶν ἔργον ἐμὲ λιθάζετε; . . . do you *want* to stone me?"

Luke I 59 ἐκάλουν αὐτὸ (*i.e.* the later John the Baptist) ἐπὶ τῷ ὀνόματι τοῦ πατρὸς αὐτοῦ Ζαχαρίαν "they *wanted* to call it Zachariah"

Acts XV 12 ἐσίγησεν δὲ πᾶν τὸ πλῆθος "the crowd became silent".

Our final conclusion may be that the non-perfective section of the verb system is unmarked as opposed to the perfective section. It depends on the context whether the former are to be evaluated as negative with regard to perfectivity (conatives; ingressive aorist) or as indifferent.

II.2.3.2.3. *The Perfective Value.* The perfective verbs have in common that they refer to the action *after* its completion, expressing a relation between this completed action, which is seen as a *state*, and a person, a specified person in the finite verbs, an unspecified person in the infinitive and participle. Such a perfect as *venόσηκα* "I have completed (not: "finished") being ill" emphasizes the completion of the action in contradistinction to the present *νοσῶ* "I am ill" which is devoid of such a stress, or "I try (want) to be ill", which excludes completion of the action: Thuc. II 31 ἀκμαζούσης ἔτι τῆς πόλεως καὶ οὐπω νενόσηκίαις,¹ Dem. IX 39 ὅφ' ὦν ἀπόλωλε κ. νενόσηκεν ἡ Ἑλλάς, and so in the N.T. John V 45 ἡλπίζατε "you have placed your hope in" (ἐλπίζετε: "place your hope in, (want to) hope), John I 15 κέκραγε "has exclamated", probably an archaism, but κράζει could also mean "wants to exclaimate" and ἔκραξεν "started to excl." Because the Greek perfect does not imply, as far as we know, a notion like "which is no longer the case", as the Latin per-

¹ Rather "not yet infested by the plague" than "not yet having suffered with the plague" as Liddell-Scott have it.

fects do in Vergil *Aeneid* II 325 *fuimus Troes, fuit Ilium et ingens* "We Trojans exist no more, are no Trojans any longer", a verb like *νερόσηκα* cannot mean "I have recovered, am no longer ill".

It is traditionally stated that the perfectives may also express the *result* of a completed action, which is visible either in the subject or in the object of the action,¹ and consequently a distinction is made within the active perfect of transitive verbs between resultatives (*λέλουκα αὐτόν*) and non-resultatives (e.g. *Iliad* P 542 *κατὰ ταῦρον ἔδηδώς*), whereas the intransitive (*τέθνηκα*) and middle perfects (*λέλουμαι*) are kept apart. But since it is also said that the state expressed by an intransitive perfect results from the anterior process,² and that the perfect may also express a result which persists in the subject,³ the term "resultative" is somewhat arbitrarily applied to transitive perfects only: as a substitute the term "Objekts-resultativum" has been proposed,⁴ because all perfects are strictly spoken resultative, the result being the state of having fulfilled a specific action, process, etc. With transitive verbs the object naturally may share to different degrees in this resultant state, depending on the nature of the action and the object itself, but it is not always easy to decide whether in a specific context this is actually the case or not.⁵ The result in the object, therefore, seems to be a matter of context; the phrase *λέλουκα αὐτόν*, for instance, may contextually imply a result that can be paraphrased by "he is clean", but as the perfectives express first of all a relation between the person referred to by the verb and the completed action, we hold it more correct to paraphrase the result implied by our short sentence as "I am the one who completed washing him" or "I am his washer".

A phrase like *ἀπέκτονα αὐτόν* should not be translated by "he is dead by my fault" but rather as "I am his murderer".

Ruipérez's definition of the perfective value is in our opinion in line with the views expressed thusfar: "... *expresar el contenido verbal . . . después de su termino*". However, when this author discusses the so-called "present perfects" like *γέγηθα*, which are sup-

¹ So Blass-Debrunner, *o.c.*, *par.* 342.

² P. Chantraine, *Histoire du parfait grec*, Paris 1926, *pp.* 4-5.

³ Chantraine, *o.c.*, *p.* 11.

⁴ Schwyzler, *o.c.*, II, *p.* 263 *n.* 3 (quoting Debrunner, I. F. XLVI, *p.* 290).

⁵ Chantraine, *o.c.*, *p.* 7. For a recent criticism of Wackernagel's concept of the resultative perfect we refer to K. L. McKay, *The Use of the Ancient Greek Perfect down to the Second Century A.D.*, *Bulletin of the Institute of Classical Studies* 12, London 1965, *p.* 1 *ss.*, particularly *p.* 9 *ss.*

posed to have the *same* value as the corresponding present indicatives (here: γηθῶ), he makes a distinction within the *termino*, based on the difference between transformative and non-transformative verbs. The former are those that indicate actions which bring about some change in the situation (“*estado*”) of the subject or object, whereas the latter are supposed to refer to actions that do not change anything. Accordingly he defines the *termino* of a transformative perfect as the *end* of the action, that of non-transformative perfects as the *beginning*. Ruipérez considers now these presents perfects as non-transformatives, and paraphrases the meaning of γέγηθα as “I started to rejoice and am still rejoicing”.¹ Although we generally share this author’s views, we must express here our doubts, because the distinction non-transformative—transformative seems to us of dubious value.

Why does such an action as γηθεῖν not change the situation, for instance that of the subject? May not the action indicated by κέκραγα, another present perfect, wholly upset a situation? How are we to class such verbs as ὀρᾶν which refers to an activity that may or may not bring about some change: it certainly does so in Luke I 22 ἐξελθὼν δὲ οὐκ ἐδύνατο λαλῆσαι αὐτοῖς καὶ ἐπέγνωσαν ὅτι ὀπτασίαν ἑώρακεν, but in 2 Kings (2 Sam.) XVIII 10-11 it is stated that no change had been caused by this action: καὶ ἀνήγγειλεν Ἰωαβ καὶ εἶπεν· Ἰδοὺ ἑώρακα τὸν Ἀβεσσαλωμ κρεμάμενον ἐν τῇ δρυὶ. 11. καὶ εἶπεν Ἰωαβ· . . . οὐκ ἐπάταξας αὐτὸν εἰς τὴν γῆν;

It would not make much sense to say that in the latter case the verb ἑώρακα has the meaning “I started to see him and am still seeing him”. These instances bring out, in our opinion, that the change caused by the action is rather a matter of speculation. As it does not seem to be a fixed characteristic of any specific verb, and even the classification of the anomalous or present perfects is open to discussion, the whole distinction cannot be considered as relevant. We think it therefore better to avoid such a theory and offer the following alternatives with regard to these present perfects:

(1) One should take care in the discussion to connect the specific perfect with the corresponding aspect of meaning of the present indicative. In Ruipérez’s example, *Iliad* Z 495 the verb βεβήκει means “she had departed” being the pluperfect to βαίνω “I depart”, not to βαίνω “I walk” as he seems to think. It is therefore incorrect

¹ *o.c.*, p. 62.

to paraphrase here: "she had started walking and was now on her way".¹

(2) In a number of cases we should revise altogether the meaning traditionally assigned to the present indicative. In our opinion $\gamma\eta\theta\omega$ means rather "I (want/try to) take a pleasure in" than "I rejoice", and consequently $\gamma\acute{\epsilon}\gamma\eta\theta\alpha$: "I have completed taking a pleasure in", which is certainly equivalent to "I *am* glad" or the like, but this latter expression may also render the present $\gamma\eta\theta\omega$ and is for that reason not suitable to define the meaning of either the present $\gamma\eta\theta\omega$ or the perfect $\gamma\acute{\epsilon}\gamma\eta\theta\alpha$. The meaning proposed, however, admits quite well of showing at the same time the difference between present and perfect. The same holds good of $\delta\acute{\epsilon}\rho\kappa\omicron\mu\alpha\iota$, which means rather "I fix my gaze on" than "I see", and $\delta\acute{\epsilon}\delta\omicron\rho\kappa\alpha$: "I have fixed my gaze on". According to context the latter may be equivalent to "I see", "I am looking at", or even to "I can see, have eyesight", but all these are likewise to be rejected as adequate definitions of the meaning.

(3) The perfectives can also be used when the speaker or writer wants to stress the completion of the action, whereas the corresponding non-perfective does not indicate this completion in a positive way. We think this may be the case with perfects like $\nu\epsilon\nu\acute{o}\sigma\eta\kappa\epsilon\nu$, $\nu\epsilon\nu\acute{o}\mu\iota\kappa\epsilon\nu$, $\eta\gamma\gamma\eta\tau\alpha\iota$, which mean "he has been *wholly* infected", "he has *completed* considering", "he has *reached* a definite opinion, or conclusion".² The non-perfective partners on the other hand are either indifferent as to completion: $\nu\omicron\sigma\epsilon\acute{\iota}$ "he is ill", $\nu\omicron\mu\acute{\iota}\zeta\epsilon\iota$ "he considers", $\eta\gamma\epsilon\acute{\iota}\tau\alpha\iota$ "he believes", or they are *conative*: "he tries to be ill, to consider, etc."

In the New Testament the perfectives regularly have the static value as described above, e.g. 1 Cor. XV 3 $\theta\tau\iota$ Χριστὸς ἀπέθανεν . . . καὶ $\theta\tau\iota$ ἐτάφη καὶ $\theta\tau\iota$ ἐγήγερται. "that Christ died . . . and that he was buried . . . and that he has risen", and 2 Tim. IV 7 τὸν καλὸν ἀγῶνα ἡγωνισμαί, τὸν δρόμον τετέλεκα, τὴν πίστιν τετήρηκα "I have fought the good fight, I have run the course, I have kept the faith".³

On the other hand the N.T. writings contain also the early signs pointing to the later fusion of the perfect and aorist indicatives. In the Apocalypse we find the following perfects with aoristic value:

¹ o.c., pp. 55-56.

² Cf. McKay, o.c., p. 6: $\chi\acute{\alpha}\sigma\kappa\omega$ 'I open my mouth' — $\kappa\acute{\epsilon}\chi\eta\nu\alpha$ 'I am agape'.

³ Cf. Blass-Debrunner, o.c., par. 340-342.

V 1 καὶ (ε)ἶδον ἐπὶ τὴν δεξιάν τοῦ καθημένου ἐπὶ τοῦ θρόνου βιβλίον . . . 7. καὶ ἦλθεν καὶ εἴληφεν ἐκ τῆς δεξιᾶς “and he came and took the scroll”, and so likewise: VII 14 εἶρηκα, VIII 5 εἴληφεν, XIX 3 εἶρηκαν.¹ These four instances happen to be perfect indicatives which have no reduplication syllable, and the same holds good of four more N.T. instances, but not of: 2 Cor. XI 25 πεποίηκα, Matt. XIII 46 πέπρακεν and XXV 6 γέγονεν. It is therefore quite conceivable that the aoristic use of perfect indicatives started with those that were not characterized by reduplication, but by prefixed εἰ- or ἐ-, the more so as in 1st century papyri this aoristic usage of perfects is restricted to εἶρηκα and εἴληφα.² The ultimate starting point of this fusion may have been the anomalous aorists ἔδωκα, ἔθηκα, which—from the formal point of view—could not be distinguished from such perfects as ἔσταλακα.

The fusion of both tenses was probably enforced by the fact that the only personal ending which the active perfect indicative had not in common with the paradigm of the aorist indicative, *viz.* the 3rd person plural in -ασιν, was gradually given up and replaced by -αν, in the Apc. in: XVIII 3 πέπτωκαν, XIX 3 εἶρηκαν, XXI 6 γέγοναν. The older ending is found only in VIII 2 ἐστήκασιν, probably because the value of this verb was more like that of a present indicative than like that of an aorist, and it need not, therefore, wonder that the verb was going over to the form class of παιδεύω in this period, *e.g.* Rom. XIV 4 στήκει for ἔστηκεν, and Mark XI 25 στήκετε for ἑστατε or ἐστήκατε. In Apc. XII 4 ἐστήκεν is dubious: ἔστηκεν or ἑστήκεν? ³

II.2.3.3. *Oppositions between the Non-Perfective Subsystems.*

II.2.3.3.1. *Introduction.* The oppositions between the non-perfective subsystems are traditionally called “*aspects*”, especially those between the durative and the aoristic tenses. This term indicates the differences in view that the speaker may have on the action as such. We shall avoid the use of this word because we have been using it in the preceding pages with reference to the different facets of the meaning of a word, and use the equivalent “*view*” instead.

¹ N. Turner, *A Grammar of NT Greek*, vol. III *Syntax*, Edinburgh 1963, pp. 69-70 mentions also II 28, III 3 and XI 17, but these are dubious: in the latter two it is rather the concomitant aorists that have a perfective value.

² Blass-Debrunner, *o.c.*, *par.* 343.

³ For a more detailed discussion of the Hellenistic perfect: Chantraine, *o.c.*, *ch.* IX.

In the productive verb class παιδεύω—παιδεύεις the form differences correlated with the differences in view are resp.:

durative -ο-/-ε-/-ει-/-ου- vs. aoristic -σα-/-σε- vs. futural -σο-/-σε-/-σει-/-σου-; these elements follow the basis παιδευ- and are themselves followed by the different personal endings. Further details, such as the form differences found in other verb classes, will be discussed later on.

11.2.3.3.2. *Value of the Durative Category.* Within this value one can distinguish between the cursive durative and the iterative durative.

11.2.3.3.2.1. *Cursive Durative.* The speaker fixes the attention of the addressee on the progression of the action during a period either long or short. This period need not, and very often does not, include the beginning and the end of the action. The aorist on the other hand refers to the action without fixing the attention on its progression.

This definition of the cursive durative we believe is similar to Ruipérez's formulation: "*Más bien la noción de durativo expresa la acción verbal considerándola en lo que dura, presentándola y fijando la atención en su desarrollo*" (our spacings).¹ This does not imply, as Ruipérez has stated before, that the action lasted for a long time, nor does on the other hand the aorist necessarily refer to short or sudden actions. Really short and sudden events like a flash of lightning have also progression, and can therefore be referred to either by the durative ἤστραπτεν, or by the aorist ἤστραψεν, according to the *speaker's* view. What really matters is that the cursive durative implies two points in time and the period in between, whereas the aorist does not. Both tenses can be accompanied by adverbs expressing a longer or shorter time, because the period implied by the cursive durative may be short or long, and the aorist is fundamentally indifferent in this respect *e.g.*

Iliad B 785 μάλα δ' ὥκα διέπρησσον πεδίοιο

Hdt. II 157 Ψαμμήτιχος δὲ ἐβασίλευσε Αἰγύπτου τέσσερα καὶ πεντήκοντα ἔτεα. τῶν τὰ ἐνὸς δέοντα τριήκοντα Ἀζωτον . . . ἐπολιόρχεε.

John II 20 τεσσεράκοντα καὶ ἑξ ἔτεσιν οἰκοδομήθη ὁ ναὸς οὗτος.

¹ *o.c.*, p. 85; translation: "The durative notion rather expresses the verbal action by viewing it as it is going on, by picturing it, and by drawing the attention to its progress".

This fact must not lead us astray when we are determining the values of these categories. The opposition durative *vs.* aoristic is proportional in: ἐδάκρυεν : ἐδάκρυσεν = ἐδάκρυεν ὅλην τὴν νύκτα: ἐδάκρυσεν ὅλην τὴν νύκτα. In the last phrase it is simply stated that she wept the whole night, in the preceding phrase the cursive imperfect makes us see or hear her weep the whole night through. As the cursive durative does therefore not express any objective difference in duration, we have not termed it “durative in the proper sense”. Although the term “durative” itself is not correct, we have retained it—just as other traditional terms—so as to avoid confusion in terminology.

II.2.3.3.2.2. *Iterative-Customary-General Durative.* This aspect of the durative value likewise implies two points in time, but in contrast to the cursive durative the implication may be here that these points are separated from each other by a not too short, often by a considerable lapse of time. The action need not be seen as going on for the whole period between these two points, but may repeatedly be interrupted (iterative), or less often (customary-general). An instance of each:

Iterative: a) Repetition of the action by the same subject: Xenophon *Comm.* I 2, 61 βελτίους γὰρ ποιῶν τοὺς συγγιγνομένους ἀπέπεμπεν “Socrates never dismissed his companions without improving them”; *Acts* III 2 ὃν ἐτίθουν καθ’ ἡμέραν πρὸς τὴν θύραν.

b) Repetition of the action by a subject consisting of many persons or things: Mark XII 41 καὶ πολλοὶ πλούσιοι ἔβαλλον πολλά “and many rich threw much money into the chest”.

Customary-General: Diogenes Laertius VI 23 βακτηρίᾳ δ’ ἐπεστηρίζετο ἀσθενήσας “when he had grown weak Diogenes used to lean on a staff”.¹

II.2.3.3.2.3. *Relations with the Non-Perfective Value.* As the durative subsystem belongs to the greater non-perfective subsystem, there may theoretically occur combinations of the following distinctions made in the durative and non-perfective values:

- (1) cursive durative
- (2) iterative durative
- (3) indifference as to perfectivity
- (4) negation of perfectivity

¹ The iterative and customary-general aspects are also correlated with one form category in many other languages *cf.* J. Gonda, *The Functions of Word Duplication in Indonesian Languages*, *Lingua* II, 1949, pp. 182-183.

The combinations of 1 or 2 with 3 need no comment. The combinations of 1 or 2 with 4 are traditionally called "conative presents resp. imperfects"; for instances we refer to *par.* 11.2.3.2.2.

11.2.3.3.2.4. *Seiler's Theory.* We may draw attention here to the opinion of Seiler who says that the essence of the Modern Greek imperfect as opposed to the aorist is "*coincidence*", that is a relation (temporal, causal, etc.) to another verb, which is usually an aorist. Whenever an imperfect is found isolated *i.e.* without another verb in the context "*on serait en présence d'un énoncé incomplet*".¹ Bakker who applies this theory, which was developed by Seiler for Modern Greek only, to older periods of that language as well,² adds in this connection: "*This verbal notion occurs near the imperfect and if not explicitly expressed must be implied*".³ Seiler gives as an example of such an incomplete utterance the Modern Greek imperfect δὲ νόσταζε "*il n'avait pas sommeil*", whereas the aorist δὲ νόσταξε "*il n'a pas eu sommeil*" is held to furnish a complete information.

Now it seems to us that an "incomplete utterance" is a somewhat dangerous concept. Any sentence may be an incomplete utterance as soon as we isolate it from its frame of reference, that is the linguistic context, if any, as well as the non-linguistic situation in which the utterance is spoken or written.

An isolated aorist can be just as enigmatical as an isolated imperfect and leans to the same extent on the hearer's complementary knowledge for being fully understood or "complete". The hearer gets this complementary knowledge from the frame of reference. Seiler is therefore right in pointing to the context with which the imperfects coincide but he might have done the same for aorists: "coincidence" is not a characteristic of the imperfect only but of all utterances.

It is of course an undeniable fact that in Koine Greek, too, im-

¹ H.-J. Seiler, *L'aspect et le temps dans le verbe néo-grec*, Paris, 1952, p. 113 "*C'est dire qu'un imparfait est nécessairement lié à un autre terme, qu'il ne se trouve jamais isolé ou que, s'il se trouvait isolé, on serait en présence d'un énoncé incomplet*".

² W. F. Bakker, *The Greek Imperative*, Amsterdam, 1966, p. 24.

³ *o.c.*, p. 23. In his article "*A Remark on the Use of the Imperfect and the Aorist in Herodotus*" (*Mnemosyne* XXI, 1968, p. 22 ss.): "*It is a fact indeed that the imperfect attaches itself to another verbal notion very easily, but that notion does not always follow*". By the applicability of Seiler's theory to ancient Greek Bakker did not mean to imply, as he tells me, that it also yielded an *exhaustive* description of the value of the imperfect in the Classical and Koine periods.

perfects and aorists were often used in such a complementary way, for instance in Acts XVI 25-26: κατὰ δὲ μεσονύκτιον Παῦλος καὶ Σιλᾶς προσευχόμενοι ὑμνοῦν τὸν θεόν, ἐπηκροῶντο δὲ αὐτῶν οἱ δέσμιοι. 26 (when this was happening:) ἄφνω δὲ σεισμός ἐγένετο μέγας. But there are many imperfects that do hardly coincide with the (few) contextual aorists; a good instance is Dio Chrysostom's VIth discourse "On Diogenes". This composition consists of two parts: paragraphs 1-39 give a lively description of this philosopher's (supposed) way of living and teaching; in paragraphs 40-62 the author makes Diogenes express himself in direct speech. The former part tells in imperfects what Diogenes was wont to do and say; these tenses have therefore our iterative-customary-general aspect; there are 39 of them whereas the aorists amount to only 6. The discourse starts as follows: Διογένης ὁ Σινωπεύς, ὅτε ἔφυγεν ἐκ Σινώπης ἀφικόμενος εἰς τὴν Ἑλλάδα διῆγε ποτὲ μὲν ἐν Κορίνθῳ ποτὲ δὲ Ἀθήνησιν. From this point onwards the aorist indicatives occur only in events told by Diogenes. Now it is clear that according to Seiler's theory the first imperfect διῆγε can be said to coincide with the aorist participle ἀφικόμενος, which we think coincides in its turn with ἔφυγεν. All the remaining imperfects depend on each other and ultimately on this verb διῆγε but hardly on the two aorists of the first paragraph. The imperfects make up an independent picture of the philosopher's habits which needs no completion by aorists. In fact we venture to maintain that Dio might even have written his introduction as follows: Διογένης ὁ Σινωπεύς, ὅτε ἔφευγεν ἐν τῇ Ἑλλάδι διῆγε *etc.*: "when Diogenes of Sinope lived as an exile in Greece, he used to stay, *etc.*"

In the same way biographies often contain such general or iterative imperfects, which have reference to a greater part or even to the whole of a person's life. The indication of such a period does not necessarily contain an aorist verb *e.g.* Plutarch *Themistocles* II ἔτι δὲ παῖς ὢν ὁμολογεῖται φορᾶς μεστὸς εἶναι καὶ τῇ μὲν φύσει συνετός, τῇ δὲ προαιρέσει μεγαλοπράγμων καὶ πολιτικός. Ἐν γὰρ ταῖς ἀνέσεσι καὶ σχολαῖς ἀπὸ τῶν μαθημάτων γιγνόμενος οὐκ ἔπαιζεν οὐδ' ἔρραθύμει, καθάπερ οἱ πολλοὶ παῖδες, ἀλλ' εὗρίσκετο λόγους τινὰς μελετῶν *etc.*

The cursive imperfects also can be used quite independent from aorists. In his biography of Julian of Cappadocia the author Eunapius suddenly inserts after an enumeration of Julian's pupils: Ἰουλιανοῦ δὲ καὶ τὴν οἰκίαν ὁ συγγραφεὺς Ἀθήνησιν ἑώρα (*ch.* 483). Now this imperfect can of course be thought to depend on an implied

aorist "after he had arrived in Athens" or the like, but it seems more probable to imply here—if needs be—: "during his journey (or: stay)".

When there are no aorists in the context of the imperfect we are in dangerous and really "unlinguistic" waters once we maintain that the presence of an imperfect always implies an aorist or even another verbal notion. It does not prove a thing that we may be able to "render" the implication of the imperfect by an aorist: that depends on our Graecistic abilities and it is a *petitio principii*, if it is used as an argument. Even such a rendition is not always possible. Let us consider both the following isolated vase signatures which are of one and the same potter:

imperfect Ἀνδοκίδες ἐποίη (i.e. ἐποίη) vs. aor. Ἀνδοκίδες ἐποίησεν. If only the latter were a complete utterance how are we to account for the former? What verbal notion is here implied? We think that the non-linguistic situation must have been very similar in both cases: a potter makes two vases and signs them. Even if it were true that the opposition pointed here to a difference in implication (coincidence), it would have to remain a mere riddle to the reader, who was very likely some unknown purchaser, living perhaps in far Etruria. One can hardly expect a person to write down a message which is in principle undecipherable.

We maintain therefore that it is the speaker i.e. here: the potter, who holds two different views of his making of the vases: the one inscription says laconically: "Andocides made (me)", the other: "Andocides was making (me)". That it is the vase which is to be seen as the potter's mouth piece can be learnt from such inscriptions as Εἰσεκίας ἐγράφει ποίησε με.¹ The choice of the imperfect does not point we think to another event with which the making of the vase coincided, but which the potter fails to mention. Why he pictured this action in its progression in one case and not in the other is difficult to say, but it may well be that he had been more engaged in the whole procedure and its result when he afterwards referred to it by an imperfect. The cause of this difference in engagement can of course not be determined any longer, but may have been the difficulty of the specific work or the joy he felt when drawing the specific designs. A similar imperfect ἐποίη is also found at the end of some inscriptions as the mason's signature,

¹ W. Klein, *Die griechischen Vasen mit Meistersignaturen*, Vienna, 1887, pp. 40, 189, 190.

for instance in O.G.I.S. 256, 10; 448, 7; 591, 7. Our conclusion may be that Seiler's theory is not valid for Koine Greek, and if it fully accounts for the facts in Modern Greek, the aspectual opposition in both stages cannot have been of quite the same character.

II.2.3.3.3. *Value of the Aoristic Category.* Above this value was already provisionally defined as the reference to an action without expressing the speaker's view on it, or any further notion. According to context the aoristics are therefore either indifferent as to the progression of the action, or they are negative with regard to it. In the latter case the speaker stresses that he does not want to see two points in time and the action in between, but only one point, which may be either at the beginning or at the end of the action.

The former is present in the so-called "ingressive" or "inceptive" aorist usually translated by "to begin" plus infinitive or the like *e.g.* Rom. XIV 9 εἰς τοῦτο γὰρ Χριστὸς ἀπέθανεν καὶ ἔζησεν "came to life again". The end of the action comes to the fore in the "aoristus confectivus" *e.g.* Matt. XXVII 20 οἱ πρεσβύτεροι ἔπεισαν τοὺς ὄχλους "the priests succeeded in persuading the crowds". As the aorist verbs belong to the non-perfective subsystem they have a value which is either indifferent as to perfectivity, or negative in this respect. We may ask therefore how these distinctions within the non-perfective value are related to the aorist usages distinguished above.

As the ingressive aorist implies contextual stress on the beginning of the action this usage is clearly incompatible with the idea of completion of the action. The ingressive use of the aorist is therefore always coinciding with negation of perfectivity. On the other hand indifference as to perfectivity, which may result in the contextual use as a perfective tense, is not at variance with the "confective" or "complexive" aorist. This confective aorist is very close to a pluperfect: it indicates a past relation with an action *up to* its end, the pluperfect a past relation with an action *after* its end.

Our final conclusion may be that the aoristic subsystem is unmarked as opposed to the durative subsystem. The present indicative has a special position which will be discussed after the description of the futural value (*par.* II.2.3.3.7).

II.2.3.3.4. *The Opposition Durative-Aoristic in the Imperative and Subjunctive.* We have already seen that the mood values of the

imperative and the subjunctive can both be defined as referring to relations person-action which are urged by the addresser. The values of view we have said represent the various points of view that the addresser may have with regard to the progression of the action. In combination with the imperative and subjunctive values the durative and aoristic views imply how the addresser regards the action with which he urges someone to have a relation. The difference between a durative and an aoristic imperative may then be shown by the following paraphrases:

dur.: I want you (him, *etc.*) to be related to an action which I consider in its progression.

aor.: I want you (him, *etc.*) to be related to an action.

In his doctoral thesis W. F. Bakker has pointed out with a wealth of material that the durative imperative often implies the notion of immediate action while the aorist imperative does not. Although he arrives at this conclusion by making use of Seiler's theory which we consider incorrect as far as Koine Greek is concerned, we think that our definitions are quite in line with Bakker's results: to urge an action which is seen as progressing may imply immediate action. It is therefore completely understandable that in prayers the aorist imperative was preferred because it was less insisting and therefore more reverential.¹

Accordingly the durative imperative can have the following aspects of meaning:

- a) "be doing this (straightaway)": acc. to the speaker the action is not yet going on;
- b) "do this continually": no implication as to existence or non-existence of the action
- c) "continue doing this": action considered as already going on.

The aspects of meaning of the aorist imperative are:

- d) "do this (*i.e.* straightaway or at some time)"
- e) "please do this" in opposition to durative a)

Both d) and e) do not imply anything as to the pre-existence of the action.

It is virtually only the durative imperative which occurs with a negation; its aspects of meaning are then; "do not immediately . . ." "do not always . . .", and "do not continue . . .". In the latter two cases the action is considered as already going on *e.g.* Luke VIII 52

¹ *o.c.*, chapters V and VI (pp. 98-141).

ἐκλαιον δὲ πάντες . . . ὁ δὲ εἶπεν· μὴ κλαίετε “do not weep (as you are doing)”. If the speaker wants to prevent an action from arising without involving the notion “immediately”, he could use the negated aorist imperative, which, however, is usually replaced by the prohibitive aorist subjunctive.

As to the durative imperative Bakker holds the same opinion as Seiler about the Modern Greek imperfect indicative, namely that it “coincides” with another verbal notion present in the context or implied by it. We have already expressed our objections against the application of this theory to Koine Greek. A single instance of the durative imperative may therefore suffice to underline what we said above about the imperfect. In Heb. XIII 3 μιμνήσκεσθε τῶν δεσμίων ὡς συνδεδεμένοι the imperative does not necessarily coincide with another verbal notion: it *can* of course mean “do remember the captives now” implying that there are some brethren that have just been imprisoned, but it can equally well mean: “make it your habit to remember the prisoners”; in this latter case there is a general prescription, no special event being implied.

The opposition durative *vs.* aorist in the subjunctive mood is hardly different from that in the imperative; the negated aorist subjunctive usually takes the place of a negated aorist imperative; in opposition to the negated durative imperative this prohibitive subjunctive implies that the action is not yet existent and should not arise, *e.g.* Matt. X 26 μὴ οὖν φοβηθῆτε αὐτούς *i.e.* future persecutors.

II.2.3.3.5. *The Opposition Durative—Aoristic in Participles.* The traditional scheme—durative ptc.: aorist ptc. = simultaneous action: anterior action—does not reflect the essence of the opposition. In reality there is no difference with the values as described above for the indicative, imperative or subjunctive. We do not deny that it is often possible to translate according to this traditional scheme, but it involves a great deal of onesidedness to reckon with these two contextual realizations only and not with the others.

In the first place the temporal relations may be quite reverse: the durative participle can also express anteriority *e.g.* Acts IV 34 πωλοῦντες ἔφερον τὰς τιμὰς τῶν πιπρασκομένων κ.ἐτίθουν παρὰ τοὺς πόδας τῶν αποστόλων: the act of selling precedes of course the act of bringing the money to the apostles; likewise the aorist can also

express simultaneity *e.g.* Acts I 24 προσευξάμενοι εἶπαν· σὺ, κύριε *etc.*

Moreover, both the durative and the aorist participles may indicate actions that are futural or intended:

durative: Acts XV 27 ἀπεστάλκαμεν οὖν Ἰούδαν καὶ Σιλᾶν καὶ αὐτοὺς διὰ λόγου ἀπαγγέλλοντας τὰ αὐτά (Vulgate: *qui . . . referent eadem*);

aorist: Acts XXV 13 Ἀγρίππας ὁ βασιλεὺς καὶ Βερνίκη κατήντησαν εἰς Καισάρειαν ἀσπασάμενοι τὸν Φῆστον (Vulgate: *ad salutandum Festum*).

These facts indicate that the durative and the aorist participles have no intrinsic value of time; they get these notions from the context. The opposition between the two is of the same nature as in the other moods.

11.2.3.3.6. *Value of the Futural Categories.* The futural value is composite: it expresses that the relation person-action is expected by the speaker and at the same time that he has an indifferent view on the action as such. This value has several variants:

a) expectation as such, not necessarily of future actions *e.g.* Rom. V 7 μόλις γὰρ ὑπὲρ δικαίου τις ἀποθανεῖται “a man will hardly die for a righteous person”;

b) wish or intention, an aspect which according to Schwyzer is found especially in the future infinitives and participles *e.g.* Acts VIII 27 ἐληλύθει προσκυνήσων “he had come to adore”

c) futurity, the simple temporal value, especially in the future indicative *e.g.* Matt. III 11 ὁ δὲ ὀπίσω μου ἐρχόμενος . . . αὐτὸς ὑμᾶς βαπτίσει *etc.*

In the Hellenistic period this whole subsystem tended to be reduced to the indicative; in the N.T. the future optative is absent, while the participle and infinitive are disappearing categories; the N.T. writings contain only seven future infinitives and thirteen future participles, most of them in Acts.

As to “view” the futural subsystem is indifferent, it can even deserve the name of “future aorist”, but unlike the past aorist, which has a past durative “opponent”, there is here no durative future “opponent”. In the futural subsystem the opposition durative *vs.* aoristic view is neutralized. Consequently we can interpret a future tense according to context as indifferent or as durative. Mk. XIV 18 is probably aoristic: εἰς ἕξ ὡμῶν παραδώσει

με, but Mk. XIII 12 is durative παραδώσει ἀδελφὸς ἀδελφόν, picturing the habits of times to come.

As a substitute of the lacking futural durative a periphrastic construction could be used consisting of ἔσομαι etc. and the durative participle e.g. Mk. XIII 25 ἔσονται . . . πίπτοντες, and Luke I 20 ἔσῃ σιωπῶν.

The relation of the futural subsystem to the other subsystems is therefore twofold:

(1) It is marked as to futurity in opposition to both the other non-perfective subsystems: for instance a futural participle has only a futural value, but a durative or aorist participle is either futural or not (see *par.* 11.2.3.3.5).

(2) The futural subsystem is unmarked as to “view”, and is together with the aorist subsystem in opposition to the marked durative subsystem.

Schematically this can be represented as follows:

subsystem:	view:	futurity:
durative	durative (marked)	indifferent (unmarked)
aoristic	indifferent (unmarked)	
futural		futural (marked)

The categories of the past tenses are only partially involved: the futural subsystem has no past category with the exception of the late and ephemeral ἐφιλονικήσουσιν (see *par.* 11.2.2.9.5). The future indicative is in direct opposition to the present indicative because there is a proportion:

durative ptc.: durative inf.: present ind. = fut. ptc.: fut. inf.: fut. ind. The opposition of the future indicative to the aorist indicative and the imperfect is indirect as far as the values of time are concerned.

11.2.3.3.7. *The Position of the Present Indicative.* We have already observed that this tense can be considered as unmarked as far as the values of time are concerned both as against the imperfect and aorist indicative, and as against the future indicative. The same holds good of the oppositions of view: the present indicative does not express any view except the non-perfective view, and as such it is unmarked as opposed to the perfect indicative.

In the opposition between the durative and aoristic subsystems, however, the present indicative is not directly opposed to another indicative since there is no present (or timeless) *aorist*. The category of the present indicative is evidently the position in which the opposition durative *vs.* aorist is neutralized.¹ Accordingly this tense may be interpreted either as durative or aoristic, depending on the context:

durative: Matt. III 11 ἐγὼ μὲν ὑμᾶς βαπτίζω ἐν ὕδατι (general/customary);

Matt. V 45 τὸν ἥλιον αὐτοῦ ἀνατέλλει (general/customary);

aoristic: Tit. III 15 ἀσπάζονται σε οἱ μετ' ἐμοῦ πάντες and so especially in historical presents *e.g.* Matt. III 13 τότε παραγίνεται ὁ Ἰησοῦς . . . τοῦ βαπτισθῆναι ὑπ' αὐτοῦ.

As a non-perfective tense the present indicative may be indifferent as to perfectivity or negate perfectivity. In the latter case the incompleteness of the action is emphasized. A good example of this usage, which is called the conative present, is John X 31 ἐβάστασαν πάλιν λίθους οἱ Ἰουδαῖοι ἵνα λιθάσωσιν αὐτόν. 32. ἀπεκρίθη αὐτοῖς ὁ Ἰησοῦς . . . διὰ ποῖον αὐτῶν ἔργον ἐμὲ λιθάζετε; "because of which of these works do you want to stone me?" . . . 33. . . . περὶ καλοῦ ἔργου οὐ λιθάζομέν σε ἀλλὰ περὶ βλασφημίας.

Conclusion. The mutual oppositions of the different non-perfective indicatives may now be set out as follows:

marked	unmarked	marked		
futural	non-futural/ non-past	past		
<i>fut.ind.</i>	<i>pres.ind.</i>	<i>aor.ind.</i>	non-durative	unmarked
		<i>imperf.</i>	durative	marked

II.2.3.4. *Oppositions between the different Perfective Subsystems.* Two subsystems are here opposed to another *viz.* the non-futural perfectives and the futural perfectives. The opposition is of the same nature as that of the durative and aoristic tenses on the one hand and the futural non-perfectives on the other. The perfect

¹ Cf. M. S. Ruipérez, *The Neutralization of Morphological Oppositions as illustrated by the Neutral Aspect of the Present Indicative in Classical Greek*, Word 9, 1953, p. 241 ss.

indicative is certainly unmarked as opposed to the pluperfect or past perfect. As it is timeless, just as the present indicative, it may sometimes have the same value as a pluperfect. Of this we have no certain N.T. instance (John II 15 *κέκραγεν?*), but *cf.* Xenophon *Hell.* VII, 1, 41 Ἐπαμεινώνδας . . . ἔγνωκε στρατευτέον εἶναι *etc.* Πεισίαν οὖν τὸν Ἀργεῖον . . . πείθει (hist. pres.) *etc.* καὶ ὁ Πεισίας . . . καταλαμβάνει (hist. pres.) *etc.* Moreover, the perfect indicative is unmarked as opposed to the future perfect, and may therefore have the same value as the latter *e.g.* Rom. XIV 23 ὁ δὲ διακρινόμενος ἐὰν φάγῃ κατακέχριται.

The Pluperfect. The time value of this tense is not pro-preterite as in Latin *i.e.* expressing a past time which precedes another past moment mentioned or implied by the context. This task is fulfilled in Greek by the imperfect or aorist indicative, *e.g.* Luke VIII 29 δέομαί σου μή με βασανίσῃς· παρήγγελλεν γὰρ τῷ πνεύματι τῷ ἀκαθάρτῳ ἐξελθεῖν ἀπὸ τοῦ ἀνθρώπου “for he *had* charged the unclean spirits to go out”, and also John IX 18 οὐκ ἐπίστευσαν οὖν οἱ Ἰουδαῖοι περὶ αὐτοῦ ὅτι ἦν τυφλὸς καὶ ἀνέβλεψεν “that he *had* been blind and *had* regained his sight”. The Greek pluperfect, however, indicates that a relation between a person and a completed action is seen as existing in the past, it is a past perfect, *e.g.* Acts XIX 32 ἦν γὰρ ἡ ἐκκλησία συγκεχυμένη καὶ οἱ πλείους οὐκ ᾔδεισαν τίνος ἕνεκα συνεληλύθεισαν “why they *had* come together”, “why they were in the state of having come together”, or more freely “why they were together”. Where we find Greek pluperfects functioning as propraeterita Latin influence may be suspected, for instance in *Hermas Sim.* VII, 1, 1 μετὰ ἡμέρας ὀλίγας εἶδον αὐτὸν εἰς τὸ πεδῖον τὸ αὐτό, ὅπου καὶ τοὺς ποιμένας ἐωράκειν καὶ λέγει *etc.*

The Future Perfect. This tense which expresses that a relation between person and completed action will exist in the future or may be expected to do so, is no longer found in the New Testament. Instead we may encounter a periphrastic construction consisting of ἔσομαι and a perfective participle *e.g.* Luke XII 52 ἔσονται γὰρ ἀπὸ τοῦ νῦν πάντε ἐν ἐνὶ οἴκῳ διαμεμερισμένοι and P. Petrie II 32 I 39 ἔσομαι τετευχώς.

11.3. Description of Forms (Verb System)

11.3.1. *Introduction.* Bearing in mind that the verb categories which we have discussed above constitute one complex system, we have to face the fact that from the formal point of view there

does not correspond to this system *one* uniform paradigm, but several by each other's side, which we shall call form classes. Of some of these classes all the constituent categories belong to productive form types, while others comprise—to different degrees—unproductive form types as well. These latter classes we shall consider as a whole as unproductive ones. The different classes as represented by the 1st and 2nd person sg. of the present indicative are:

- Productive:* 1) παιδεύω, -εις/καλύπτω/πράσσω/μιαίνω: c. 16.300 verbs.
 2) νικῶ, -ᾶς/ἀνιῶ, -ᾶς: c. 2300 verbs.
 3) φιλῶ, -εῖς: c. 7590 verbs.
Probably prod: 4) δουλῶ, -οῖς: c. 845 verbs.
Unproductive: 5) λαμβάνω, -εις with aorist ἔλαβον, -ες: c. 35.
 6) βαίνω, -εις with aorist ἔβην, -ς: 2.
 7) ἀκούω, -εις with perfect ἀκήκοα, -ς: 6.
 8) τίθημι, -ης: c. 30.

Of types 5, 6 and 7 the durative conjugation is similar to that of type 1., but either the aorist or the perfect is of an unproductive kind; the durative conjugation of type 8 is, however, different from that of all the others, while some of the aorists and perfects resemble those of types 5, 6, 7, and others are wholly different.

The figures for the productive categories are inclusive of the compound verbs such as ἀναπαιδεύω, *etc.* We must remark that it is difficult to give the exact number of members of an unproductive category for the Hellenistic period because the use of an irregular tense may be a bookish Atticism. The verbs mentioned are those found in the LXX, the Ptolemaic papyri and the N.T., which are as a whole not Atticistic, except for the 3rd Book of Maccabees and 2 Peter. The figures added are therefore not absolute, but meant to give an impression of the extent of a category; they do not include compound verbs.¹

The different forms of the categories of person/voice, infinitive and participle will be displayed in charts. The subsystems (durative, aoristic, *etc.*) are kept apart in them as far as they do not conflict

¹ Neither can we give the exact figures for the productive categories but we have made a rough estimate on the ground of Kretschmer-Locker's reverse dictionary. The figures pertain to Classical and Koine Greek together and include the prepositional compounds. The productivity of type 4. δουλῶ is doubtful: it comprised c. 480 non-compound verbs.

with the division arising from the variety of these endings. In order to account for the procedures by which the moods and the bases of the subsystems are formed separate descriptions will be necessary, because the different types that are here to be distinguished do not run parallel with the division according to personal endings, for instance the verbs παιδεύω and πράσσω belong to the same form class as far as the personal categories are involved, but in the formation of the futural subsystem they are different: παιδεύω-παιδεύσω, but πράσσω-πράξω; still more different in this respect are παιδεύω and κρίνω: fut. ind. παιδεύσω, -σεις *vs.* κρίνω, -εῖς, which do not even belong to the same class of personal endings. All the subtypes which we have added above represent such peculiarities in the formation of some of the subsystems.

According to their combination with either of the categories of voice the categories of person, infinitive and participle occur in two varieties, active and medio-passive (exception: the dur. imperative of type 4, δούλου, is both active and middle). As the passive voice (aorists and futures) are already characterized by a special element of form (in the productive type: -θη -/θ -) the personal endings correspond either with the active endings of the other categories or with the middle ones: παιδευθησόμεθα and ἐπαιδευθήμεν occur by each other's side without difference in voice.

Except for the differences in endings and vocalism there is a consistent difference in accentuation between type 1. παιδεύω on the one hand and types 2, 3, and 4 on the other. The durative verbs of the latter have resp. final and penult accent where those of type 1. have penult accent and antepenult accent: *cf.* νικῶ, φιλῶ, δουλῶ, νικᾶν, φιλεῖν, δουλοῦν with παιδεύω and παιδεύειν, and νικά, φίλει, δούλου, ἐνίκων, ἐφίλουν, ἐδούλουν with παίδευε and ἐπαίδευον. Where types 2, 3, 4 have antepenult accent type 1 has it, too, because the accent in Greek cannot rest on the fourth syllable from the end. All types have also the same accent where a morphological restriction is involved: παιδεύου, ἐπαιδευόμεν have penult accent just as νικάω, ἐνικώμεν, because ου[u] and η[e] in final syllables are incompatible with antepenult accent. In Classical Attic this restriction held also for ω, which historically accounts for the similar accent of παιδευέτω, παιδευέσθω and νικάτω, νικάσθω in Hellenistic Greek, where the opposition between long ω[o:] and short ο[o] would be levelled.

II.3.2. *Chart I, facing page 280.*

II.3.3. *Remarks on Chart I. Type 1. παιδεύω (productive).*

General. This first chart is the only one that displays a full paradigm: the others give only those parts of the paradigms in question that are different from type 1. παιδεύω. The upper horizontal column lists in phonetic transcription the various bases which we have assumed in order to simplify the description as a whole and to display the maximal congruity between the form classes (see the discussion in *par.* 5.4). To these bases which are each time represented by figures in the columns underneath one should add the endings of person/voice as given in the last vertical column of each subdivision. The accentuation is indicated as follows: penult by "A", final by "B", while antepenult accent is not especially indicated. For brevity's sake we have combined the durative¹ and futural subsystems because of the complete similarity in endings; for the same reasons the durative subjunctive is listed with the aoristic subjunctives (active and middle). The perfect indicative is given twice: the paradigm with 3. p. pl. -*κασιν* in the perfective column, that with -*καν* in the column of the active aorist indicative (in brackets), likewise because of complete similarity of endings.

Specific. Durative. In the 2nd p. sg. med. of the pres. ind. παιδεύει [-i] and παιδεύῃ [-e] were optional variants, but after the phonetic value of *η* had changed from [e] to [i] the difference was only orthographical. The 3rd p. pl. act. has a variant in -*ωσιν* [-osin] e.g. Apc. V 9 (A) *αδωσιν*, which was probably taken over from the subjunctive paradigm in later times, when due to the phonetic change mentioned of *η* [e] to [i] the indicative and subjunctive paradigms had become homophonous except for παιδεύετε/παιδεύητε and παιδεύουσιν/παιδεύωσιν. The form *ἔδωσιν* may therefore be explained from the trend to unify both moods (cf. types 2. *νικῶ* and 4. *δουλῶ*), but in all probability it did not yet figure in the autograph of the Apc., which was written before the phonetic change mentioned had taken place; the other mss. have *αδουσιν* at V 9, and at XIV 3 and XV 3 ms. A has likewise this form.

The 3rd p. pl. act. of the imperfect has incidentally [-san] instead of [-n] but seldom so in the N.T. e.g. Mark I 32 (D) *ἐφέροσαν*; it occurred more often in the LXX.

Futural. The obsolete future perfect πεπαιδευσομαι was wholly conjugated like the fut. med. παιδεύομαι.

¹ By the term 'durative' we refer also to the pres.ind. because of the formal likeness which it bears to the imperfect etc.

11.3.2 Chart 1: Type 1. παιδεύω

1. Durative and Futural								2. Aoristic (Act., Med.).								3. Aoristic (Pass.).						4. Perfective							
	categories	1. pedewo 2. pedewso 3. pedewtheso 4. epedewo	1. pedewe 2. pedewse 3. pedewthese 4. epedewe	1. pedewi 2. pedewsi 3. pedewthesi	1. pedewu 2. pedewsu 3. epedewu	1. pedewü 2. pedewsü	personal endings; inf., ptc.		categories	1. pedewso 2. pedewo	1. pedewse 2. pedewe	1. epedewsa 2. pedewsa (3. pepedewka)	1. epedewse 2. pedewse (3. pepedewke)	1. epedews 2. pedews	personal endings; inf., ptc.		categories	1. pedewtho 2. pedewthe 3. pedewthie	1. pedewthe 2. pedewthi	personal endings; inf., ptc.		categories	1. pepedewka 2. pepedewke 3. pepedewk 4. epedewki	1. pepedew 2. epedew	personal endings; inf., ptc.				
1. pr. ind. act. 2. fut. act.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	1,2		1,2			—, A —s, A —, A —men —te —sin	1. subj. aor. act. 2. subj. dur. act.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	1,2	1,2				—, A —s, A —, A —men —te —sin	1. subj. aor. pass.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	1.		—, B —s, B —, B —men, A —te, A —sin, A	pf. ind. act.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	1.		— —s —n —men —te —sin				
1. pr. ind. med. 2. fut. med. 3. fut. p.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	1,2,3	1,2,3	1,2,3			—me —, A —te —metha —sthe —nte	1. subj. aor. med. 2. subj. dur. med.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	1,2	1,2				—me —, A —te —metha —sthe —nte					pf. ind. med.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.				1. 1. 1. 1. 1.	—me —s —te —metha —sthe —nte			
4. imperf. act.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	4	4				—n —s —n —men —te —n	1. aor. ind. act. (3. pf. ind. act.)	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.			1,3 1,3 1,3 1,3	1,3		— —s —n —men —te —n	2. ind. aor. pass. 3. opt. aor. pass.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	2,3 2,3 2,3 2, (3) 2, (3)	—n, A —s, A —, A —men —te —san	ppf. act.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.			1. 1. 1. 1. 1.	—n, A —s, A —, A —men —te —san				
4. imperf. med.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	4	4		4		—men, A —, A —to —metha —sthe —nto	1. aor. ind. med.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.			1. 1. 1. 1.	1.		—men, A —o, A —to —metha —sthe —nto					ppf. med.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.				2. 2. 2. 2. 2.	—men, A —so —to —metha —sthe —nto			
1. opt. dur. act. 2. opt. fut. act.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.					1,2 1,2 1,2 1,2 1,2 1,2	—mi —s, A —, A —men —te —en	2. opt. aor. act.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.				2. 2. 2. 2. 2. 2.		—mi —s, A —, A —men —te —en	opt. aor. pass.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	3. 3. 3.	—n, A —s, A —, A —men —te —en										
1. opt. dur. med. 2. opt. fut. med.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.					1,2 1,2 1,2 1,2 1,2 1,2	—men, A —o —to —metha —sthe —nto	2. opt. aor. med.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.				2. 2. 2. 2. 2. 2.		—men, A —o —to —metha —sthe —nto														
imp. dur. act.	2.s. 3.s. 2.p. 3.p.		1. 1. 1. 1.				— —to, A —te —tosan	imp. aor. act.	2.s. 3.s. 2.p. 3.p.			2. 2. 2.		2.	—on —to, A —te —tosan	imp. aor. pass.	2.s. 3.s. 2.p. 3.p.	1. 1. 1. 1.	—ti —to, A —te —tosan										
imp. dur. med.	2.s. 3.s. 2.p. 3.p.		1. 1. 1.		1.		—, A —stho, A —sthe —sthosan	imp. aor. med.	2.s. 3.s. 2.p. 3.p.			2. 2. 2.	2.		— —stho, A —sthe —sthosan					imp. pf. med.	2.s. 3.s. 2.p. 3.p.				1. 1. 1.	—so —stho, A —sthe —sthosan			
inf. act. dur. fut.				1,2			—n, A	inf. aor. act.					2.		—, A	inf. aor. pass.		1.		—ne, A	inf. pf. act.		1.			—ne, A			
inf. med. dur. fut.			1,2				—sthe	inf. aor. med.				2.			—sthe						inf. pf. med.				1.	—sthe			
1. ptc. dur. act. 2. ptc. fut. act.	nom. s.m. nom. s.n. gen. s.m/n. dat. p.m/n. nom. s.f. gen. s.f.	1,2 1,2 1,2					—n, A —n, A —ntos —sin —sa —ses, A	ptc. aor. act.	nom. s.m. nom. s.n. gen. s.m/n. dat. p.m/n. nom. s.f. gen. s.f.			2. 2. 2. 2. 2. 2.			—s, A —n, A —ntos —sin —sa —ses, A	ptc. aor. pass.	nom. s.m. nom. s.n. gen. s.m/n. dat. p.m/n. nom. s.f. gen. s.f.	1. 1. 1. 1. 1. 1.	—s, B —n, B —ntos, A —sin, A —sa, A —ses, A	ptc. pf. act.	nom. s.m. nom. s.n. gen. s.m/n. dat. p.m/n. nom. s.f. gen. s.f.	1. 1. 1. 1. 1.		—ós, B —ós, B —ótos, A —ósin, A —üja, A —üjes, A					
1. ptc. dur. m. 2. ptc. fut. m.	nom. s.m. nom. s.n. nom. s.f.	1,2 1,2 1,2					—menos —menon —méne, A	ptc. aor. med.	nom. s.m. nom. s.n. nom. s.f.			2. 2. 2.			—menos —menon —méne, A					ptc. pf. med.	nom. s.m. nom. s.n. nom. s.f.				1. 1. 1.	—ménos, A —ménon, A —méne, A			

11.3.4 Chart II: Types 2. νικῶ, 3. φιλῶ 4. δουλῶ

τ. 2. νικῶ, -ῥε						τ. 3. φιλῶ, -εῖρε								τ. 4. δουλῶ, -οῖρε					
categories	1. niko 2. eniko	1. nika 2. enika	nikoe	personal endings; inf., ptc.	categories	philo phile	1. philo 2. ephilo	1. philu 2. ephilu	philü philüe	personal endings; inf., ptc.	categories	dulo dülü	1. dulu 2. edulu	dülüe	personal endings; inf., ptc.				
					subj. dur. act.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	1. 1. 1. 1. 1.			—, B -s, B —, B -men, A -te, A -sin, A	subj. dur. act.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	1. 1. 1. 1. 1.		—, B -s, B —, B -men, A -te, A -sin, A				
					subj. dur. med.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	1. 1. 1. 1. 1.			-me, A —, B -te, A -metha -sthe, A -nte, A	subj. dur. med.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	1. 1. 1. 1. 1.		-me, A —, B -te, A -metha -sthe, A -nte, A				
pres. ind. act., subj. dur. act.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	1. 1. 1. 1. 1.		—, B -s, B —, B -men, A -te, A -sin, A	pres. ind. act.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	1. 1. 1. 1. 1.			—, B -s, B —, B -men, A -te, A -sin, A	pres. ind. act.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	1. 1. 1. 1. 1.		—, B -s, B —, B -men, A -te, A -sin, A				
pres. ind. med., subj. dur. med.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	1. 1. 1. 1. 1.		-me, A -se, A -te, A -metha -sthe, A -nte, A	pres. ind. med.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	1. 1. 1. 1. 1.			-me, A -(se) (A) -te, A -metha -sthe, A -nte, A	pres. ind. med.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	1. 1. 1. 1. 1.		-me, A -(se) (A) -te, A -metha -sthe, A -nte, A				
imperf. act.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	2. 2. 2. 2. 2.		-n, A -s, A —, A -men, A -te, A -n, A	imperf. act.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	2. 2. 2. 2. 2.			-n, A -s, A —, A -men, A -te, A -n, A	imperf. act.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	2. 2. 2. 2. 2.		-n, A -s, A —, A -men, A -te, A -n, A				
imperf. med.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	2. 2. 2. 2. 2.		-men, A —, A -to, A -metha -sthe, A -nto, A	imperf. med.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	2. 2. 2. 2. 2.			men, A- —, A to-, A -metha -sthe, A -nto, A	imperf. med.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	2. 2. 2. 2. 2.		-men, A —, A -to, A -metha -sthe, A -nto, A				
opt. dur. act.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	1. 1. 1. 1. 1.		1. 1. 1. (1.) (1.)	opt. dur. act.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.			1. 1. 1. 1. 1.	-n, A -s, A —, A men, A -te, A -en, A	opt. dur. act.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	1. 1. 1. 1. 1.		-n, A -s, A —, A -men, A -te, A -en, A				
opt. dur. med.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	1. 1. 1. 1. 1.		-men, A -o, A -to, A -metha -sthe, A -nto, A	opt. dur. med.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.			1. 1. 1. 1. 1.	-men, A -o, A -to, A -metha -sthe, A -nto, A	opt. dur. med.	1.s. 2.s. 3.s. 1.p. 2.p. 3.p.	1. 1. 1. 1. 1.		-men, A -o, A -to, A -metha -sthe, A -nto, A				
imp. dur. act.	2.s. 3.s. 2.p. 3.p.		1. 1. 1. 1.	—, A -to, A -te, A -tosan			1. 1. 1. 1.			—, A -to, A -te, A -tosan			1. 1. 1. 1.		—, A -to, A -te, A -tosan				
imp. dur. med.	2.s. 3.s. 2.p. 3.p.	1. 1. 1. 1.		—, A -stho, A -sthe, A -sthosan			1. 1. 1. 1.			—, A -stho, A -sthe, A -sthosan			1. 1. 1. 1.		—, A -stho, A -sthe, A -sthosan				
inf. dur. act.			1.	-n, B			1.			-n, B			1.		-n, B				
inf. dur. med.			1.	-sthe, A			1.			-sthe, A			1.		-sthe, A				
ptc. dur. act.	nom.	1.		-n, B		1.				-n, B		1.			-n, B				
	s.m.			-n, B				1.		-n, B			1.		-n, B				
	gen.			-ntos, A				1.		-ntos, A			1.		-ntos, A				
	s.m/n.			-sin, A				1.		-sin, A			1.		-sin, A				
	dat.			-sa, A				1.		-sa, A			1.		-sa, A				
	p.m/n.			-ses, A				1.		-ses, A			1.		-ses, A				
	s.f.																		
ptc. dur. med.	nom.	1.		-menos				1.		-menos			1.		-menos				
	s.m.			-menon				1.		-menon			1.		-menon				
	s.n.							1.					1.						
	s.f.			-méne				1.		-méne			1.		-méne				

Aoristic (Active-Middle). The 2nd p. sg. act. was incidentally in [-es] e.g. Matt XI 25 (D) ἀπεκάλυψες cf. Apc. II 4 (Ⲭ*, C) ἀφῆκες and VI 16 (Ⲭ) κρυψεται i.e. κρύψετε for κρύψατε. In Atticizing writings one may find the optatives 2. s. παιδεύσειας, 3. s. παιδεύσειεν, 3. p. παιδεύσειαν instead of παιδεύσαις, παιδεύσαι, παιδεύσαιεν. Moreover, the 3. p. pl. is sometimes in [-san] e.g. Acts XVII 27 (D) φηλαφή-σαισαν and εὐροισαν

Aoristic (Passive). The ending of the 2. p. imperative is -θι [-thi] in the unproductive type of passive aorists that do not contain the element -θη [-the], -θε [the] or -θ- [th], like ἐστάλην imp. στάληθι.

Perfective. The 2nd p. sg. act. of the indicatives was incidentally in [-es] e.g. Apc. II 3 (A, C) κεκοπίακες and II 5 (Ⲭ) πέπτωκες (cf. act. aor.); for 3rd p. pl. -καν see *par.* II.2.3.2.3.

If the ending [-se] of the 2nd p. sg. of the middle perfect of a verb is preceded by [k, p, l, n] or [r] (written resp. -ξαι, -ψαι, -λσαι, -νσαι, -ρσαι) its 2nd p. pl. middle perfectives (indicative pf. and ppf., and imperative), middle infinitive pf. and 3rd p. imperatives pf. do not end resp. in [-sthε] and [-stho(san)], but in [-thε] and [-tho(san)] e.g. (ἐ-) πεφυλάχθε, πεφυλάχθαι, πεφυλάχθω(-σαν). These verbs do not have a 3rd p. pl. in the pf. ind. and in the ppf., but periphrases are used instead: πεφυλαγμένοι (-αι) εἰσίν / ἦσαν (see *par.* II.3.12.4).

The perfective imperatives were obsolete in the Hellenistic period, the only N.T. instances being πεφίμωσο (Mark IV 39) and ἔρρωσο (Acts XXIII 30; Ⲭ). In the Ptolemaic papyri they occurred only in chancery style.¹

Participles. The difference between the masc. παιδεύων, πεπαιδευκώς, and the neuter παιδεῶν, πεπαιδευκός was purely orthographical. Hence it is doubtful whether at Apc. V 6 A καὶ ἰδοὺ καὶ (mss. καὶ εἶδον) . . . ἄρνιον ἐστηκός (so 025, 046, but Ⲭ: -κως) ὡς ἐσφαγμένον, ἔχων (so also Ⲭ, 046, but 025: ἔχον) κέρατα ss. the masc. participle is a construction *ad sensum* (the Lamb is Christ), or is due to the confusion ο/ω. The latter seems more probable in view of the ptc. neut. ἐσφαγμένον.

The declension of the masc. participles in -μενος and -μένος comprised a special vocative category e.g. Susanna 52 πεπαλαιωμένε, but the nom. could be used instead: Dio Chr. LIX 9 ὃ μηδενὸς ἀποσχόμενος . . . Ὀδυσσεῦ. The declension of the fem. perf. participles follows that of adj. type μέλαινα (*par.* 7.3.1): gen. sg. συνειδυῖτης (Acts V 2).

¹ Blass-Debrunner, o.c., *par.* 346.

II.3.4. *Chart II, facing page 281.*

II.3.5. *Remarks on Chart II. Types 2.-4. νικῶ, φιλῶ, δουλῶ (productive).*

General. Only the durative section of each paradigm is given, as the endings in the remaining subsystems are not different from those of type 1. The futural, aoristic and perfective bases are easily formed by separating from the bases as shown in chart I all that follows on the element (ε(πε)pedew- and adding it to resp. νικη [nike], ἀνια [ania], φιλη [phile], and δουλῶ [dulo]:

νικήσω etc., ἐνίκησα etc., ἐνικήθην etc., νενίκηκα etc.
 ἀνιάσω etc., ἡνίασα etc., ἡνιάθην etc., ἡνίακα etc.
 φιλήσω etc., ἐφίλησα etc., ἐφιλήθην etc., πεφίληκα etc.
 δουλῶσω etc., ἐδούλωσα etc., ἐδουλώθην etc., δεδούλωκα etc.

For the formation of ἀνιάσω etc. and the perfectives we refer to *par.* II.3.II. and *par.* II.3.I2.

In the Hellenistic period type νικῶ and type φιλῶ tended to melt into one: νικῶ, νικᾶς, νικᾷ, νικοῦμεν, νικᾶτε, νικοῦσιν. In the Apc. this merging is found only in some participles: II 7 (A) and 17 νικοῦντι (A, C), XV 2 νικοῦντας (C) but at XXI 27 (A) and XXII 2 (A) ποιῶν (neuter sg.) instead of ποιοῦν (hypercorrect?).

Of the verb ζῶ the alternative basis is not in [-a] but in [-e]: ζῶ, ζῆς, ζῆ, ζῆν, ζῶν, of χρῶμαι it is either in [-a] (as in Classical Attic) or in [-e]: 2. p. sg. χρᾶσαι (Hermas, *Vis*, III 6, 7), inf. χρῆσθαι (2 Macc. XI 31) by the side of χρᾶσθαι (2 Macc. VI 21!). Verbs in -έω such as πλέω, πνέω, χέω, δέομαι may be conjugated after the dur. subsystem of παιδεύω, but the basis in -εε (cf. type 1. pedewε) can be replaced by one ending in [-i] (cf. type 3. phili). Hence we find by the side of ἐκχέετε (Apc. XVI 1): ἐκχεῖται (Matt. IX 17), and at Luke VIII 38 ἐδέετο (N*, C*) by the side of ἐδεῖτο (B), but subj. πνέη (Apc. VII 1), ptc. πλέων (Apc. XVIII 17).

A number of non-durative verbs, too, are conjugated according to one of the above paradigms:

a) Like pres. ind. νικῶ: the Atticistic future indicatives of βιβάζω and of the verbs in -άννυμι: βιβῶ, -ᾶς and with e.g. κρεμάννυμι fut. ind. κρεμῶ, -ᾶς, and the aoristic subjunctive ἀποδρῶ (pres. ind. ἀποδιδράσκω, aor. ind. ἀπέδραν). The former were replaced by βιβάσω and κρεμάσω, while the latter was obsolete in the N.T.¹

b) Like pres. ind. φιλῶ: the future indicatives of liquid stems e.g. pres. ind. κρίνω, λευκαίνω, fut. ind. κρινῶ, -εῖς, and λευκανῶ, -εῖς (see *par.* II.3.II.).

¹ The verb is, however, still found in the LXX.

c) Like dur. subj. φιλῶ: besides all the passive subjunctives παιδεύθῶ, σταλῶ *etc.* the aor. sub. βῶ (pres. ind. βαίνω, aor. ind. ἔβην) and the perfective subjunctives εἰδῶ, ἐστῶ (perf. ind. οἶδα, ἔστηκα).

d) Like the dur. subj. δουλῶ: the aor. subj. γνῶ (pres. ind. γινώσκω, aor. ind. ἔγνων).

Specific. Present Indicative. The 2nd. p. sg. middle in [-σε] is regular only in type 2: νικᾷσαι, but incidental in types 3 and 4.

Imperfect. The 3rd p. pl. act. incidentally ends in [-σαν] *e.g.* Acts XVII 5 (D) ἔθορυβοῦσαν, Rom. III 13 ἐδολοιοῦσαν (Psalm V 10). Such forms are more frequent in the LXX.

Subjunctive. Of type 2. νικῶ the dur. indicative and subjunctive are wholly identical. Accordingly there was a tendency to drop the opposition pres. ind. *vs.* subjunctive from type 4. δουλῶ *e.g.* at Gal. IV 17 ἵνα . . . ζηλοῦτε.

Optative. Instead of the active plural categories mentioned one may incidentally find the longer νικώημεν, -ητε, -ησαν, φιλοίημεν *etc.* δουλοίημεν *etc.*

Infinitive. By the side of type 4. δουλοῦν one may encounter δουλοῖν [-ün] *e.g.* Heb. VII 5 (B, D*) ἀποδεκατοῖν, and ἐγμισθοῖν in one of the papyri from the Cave of the Letters dated 6/5/124 A.D.¹

II.3.6. *Types* 5. λαμβάνω—ἐλαβον, 6. βαίνω—ἔβην, 7. ἀκούω—ἀκήκοα.

The peculiarity of this unproductive class is the form opposition between the durative and aor./pf. subsystems. It is, however, unnecessary to draw up special charts because the duratives λαμβάνω, εὐρίσκω, φέρω *etc.* follow type 1. παιδεύω in conjugation, while the aorists ἐλαβον, ἤρουν, ἤνεγκον, *etc.* do the same *i.e.* are conjugated like the imperfect ἐπαίδευον, but the middle imperatives, and the infinitives and participles had a different accentuation: λαβοῦ, λαβεῖν, λαβέσθαι, λαβών, λαβοῦσα, λαβόν, λαβόμενος. A number of active imperatives of this type were likewise finally accented (*cf.* λαβοῦ) in Classical Attic: λαβέ, εὐρέ, ἰδέ, εἰπέ, ἐλθέ, but some of these had penult accent in Koine Greek: λάβε, ἔδε, perhaps also φάγε.

The same holds good of type 6. βαίνω—ἔβην, γινώσκω—ἔγνων, of which the aorist conjugation resembles that of the pass. aor. ἐπαιδεύθην, hence imp. βῆθι (in compounds also -βα: Apc. IV 1 ἀνάβα, but A: ἀνάβηθι) and γνῶθι, inf. βῆναι, γνῶναι, but subj. βῶ, βῆς, γνῶ, γνῶς or γνοῖς, opt. βαίην, γνοίην, ptc. βάς, βᾶσα, βάν, γνούς (gen. sg. γνόνης), γνοῦσα, γνόν. The conjugation of type 7. ἀκούω—ἀκήκοα is like that of παιδεύω and πεπαίδευκα.

¹ Israel Exploration Journal XII 1962 p. 259.

II.3.7. *Chart III, facing page 284.*

II.3.8. *Remarks on Chart III. Type 8. τίθημι (unproductive).*

General. The endings in the futural, passive aoristic and perfective sub-systems are not different from those in type I. παιδεύω. As there is no uniform procedure of forming the bases of these sub-systems we shall enumerate them in a list. Many of these verbs—at least their durative categories—were going over to one of the productive classes in the Hellenistic period, our instance τίθημι to τίθω (late) *e.g.* προσετίθοντο (Acts V 14: *curs.* 1,3,4,47*), or to τιθῶ, —εῖς: Luke VIII 16 (D) τιθεῖ, Acts IV 35 ἐτίθουν (3rd p. pl.).

Specific Remarks. Ἀφίημι follows τίθημι except in the 3rd p. pl. pres. ind. act. ἀφιᾶσιν; the pres. ind. tended to be replaced by ἀφίω (*cf.* παιδεύω) *e.g.* Apc. II 20 ἀφεῖς *i.e.* ἀφίεις, XI 9 ἀφίουσιν, the imperfect by ἤφιον (*cf.* ἐπαίδευον) *e.g.* ἤφιεν (Mark XI 16); imperative: ἄφιε (P. Oxy. 1758, 12; I A.D.); aor. pl. ἔθεμεν *ect.* and ἐθήκαμεν *etc.*; note the aor. ind. ἀφῆκες in Apc. II 4 (X*, C); the simplex ἔημι is now obsolete.

Ἰστημι: bases ἰστη [iste] and ἰστα [ista] corresponding with resp. [tithe/tithi] and [tithe], except in the 3rd p. pl. act. pres. ind. act. ἰσῶσιν, and the act. ptc. ἰστάς (gen. sg. ἰσάντος), ἰσᾶσα, ἰσάν. The pres. ind. tended to be replaced by ἰσάνω (*cf.* παιδεύω) *e.g.* μεθιστάνει (Hermas, *Vis.* I 3, 4) συνιστάνειν (2 Cor. III 1); the intransitive aorist ἔστην follows the conjugation of the act. imperfect ἴστην, but with -η- also in the plurals: ἔστησαν; imperative στήθι, στήτω, *etc.*, but in compounds -στηθι and -στα by each other's side *e.g.* Acts XII 7 ἀνάστα; infinitive στήναι; participles στάς, σάν, σᾶσα; perfect: ind. ἔστηκα, pf. subj. ἐστῶ, imperative ἔσταθι *etc.*, ptc. ἐσώς or ἐστηκώς (*e.g.* Apc. V 6); the perfect tended to be replaced by the pres. ind. στήκω (*cf.* παιδεύω), the pluperfect εἰστήκειν by ἔστηκον (εστηκεν at Apc. XII 4? but *cf.* VII 11 εἰστήκεισαν). The pres. ind. πίμπλημι, πίμπρημι tended to go over to τ. 2. νικῶ: πιπρῶ, and πιπλῶ. Like the middle dur. ἵσταμαι are conjugated: δύναιμαι, 2nd p. sg. δύνασαι or δύνη (the latter in Apc. II 2); the verb tended to go over to type I. παιδεύομαι, hence *e.g.* δυνόμεθα (Acts IV 20, B); moreover, κάθημαι, imperative 2nd p. sg. κάθησο or κάθου (*cf.* παιδεύου, φίλου), 3rd p. sg. καθήσθω, *etc.*, and ἐπίσταμαι, imperative 2nd p. sg. ἐπίστασο or ἐπίστω (*cf.* νίκω), 3rd p. sg. ἐπιστάσθω, *etc.*

Δίδωμι. The pres. ind. has orthographical variation ω/o corresponding with the distribution of [tithe] and [tithe] in τίθημι; dur. subj. διδῶ, διδοῖς, *etc.* (*cf.* subj. δουλῶ); in the remaining durative categories bases διδου [didu] and διδο [dido] correspond in distribution with resp. [tithe/tithi] and [tithe]; the pres. ind. tended to go

II.3.7. *Chart III: Type 8 τίθημι*[illegible]

over to type 4. δουλῶ (*cf.* the dur. subj.) *e.g.* διδῶ (Apc. III 9), -διδοῖ (I Clem. XXIII 1), ptc. neut. ἀποδιδούν (for -διδόν) in Apc. XXII 2, but on the other hand the "old" form, διδάσιν in XVII 13; the active imperfect went over to ἐδούλουν: Acts IV 33 ἐδίδουν (3rd p. pl.), the middle imperfect, however, to type ἐπαιδευόμεν: Acts IV 35 διεδίδετο, whereas the imperative δειδι (*i.e.* δίδει, P. Oxy. 1185, 3) shows transition to type 3. φιλῶ : imperative φίλει; in Modern Greek δίδω, δίδεις, δίδει, *etc.* or δίνω, δίνεις *etc.*

Δείκνυμι (and some 40 more verbs in -νυμι): one basis δεικνυ [diknū, dignū], the former difference δεικνῦ/δεικνῦ has been levelled: all tended to go over to pres. ind. -νύω: Apc. XXII 8 (A) διγνύοντος (for δεικνύντος), and so ἀπόλλυμι to ἀπολλύω: Apc. IX 11 ptc. Ἀπολλύων, but ἀνοίγνυμι to ἀνοίγω: Apc. III 7 ἀνοίγει. The verbs in -άννυμι went over to type 2. νικῶ *e.g.* κρεμάννυμι to κρεμῶ, -ᾶς, fut. ind. κρεμάσω; ῥήγνυμι and κατάργνυμι to ῥήσσω and κατάσσω or κατεάσσω.

Εἰμί: εἶ, ἐστίν, ἐσμέν, ἐστέ, εἰσίν; ¹ imperfect ἤμην, ἦς, ἦν, ἤμεθα or ἤμεν, ἦτε, ἦσαν; imperative ἴσθι or ἔσο, ἔστω or ἦτω, ἔστε, ἔστωσαν, ptc. ὢν, ὄν, (gen. sg. ὄντος, dat. pl. οὔσιν), οὔσα; subj. ὦ, ᾗς *etc.*; fut. ind. ἔσομαι, 3rd p. sg. ἔσται.²

Φημί: obsolete, only φημί, 3. p. sg., φησίν, 3rd p. pl. φασίν, 3. p. sg. imperf. ἔφη occur in the New Testament.

11.3.9 *Forms of the Categories of Past Time and Mood.* The *Category of the Past Indicative* differs from the Non-Past Indicative a) by the personal endings, and b) by the form difference called "augment". It is only with the latter that we are here concerned.

A. Productive Types

a) ἐ- *prefixed* to bases with initial consonant *e.g.* ἐπαιδευες and ἐπαιδευσας *vs.* παιδεύεις, and ἐπεπαιδεύκεις *vs.* πεπαιδευκας. When the initial consonant is ρ we find ἐρ- prefixed instead of ἐ-, but it is doubtful whether there was any difference between *e.g.* ἔρριπτον and *ἔριπτον, both were probably pronounced [éripton].

¹ Except for the 2nd p.sg. εἶ and φῆς the present indicatives εἰμι and φημι have no accent of their own, if the preceding word has a final acute or circumflex, or a penult circumflex (resp. antepenult acute) and a final acute together, *e.g.* στρατηγός ἐστιν, δοῦλός ἐστιν. Elsewhere these verbs have a final acute or gravis *e.g.* ὁ λόγος ἐστὶν καλός, but ἔστιν has penult acute after ἀλλ', οὐ, τοῦτ', εἰ, καί, ὥς, and if it is the first word of the sentence or of the verse.

² The participle is used in the Apc. only in the formula ὁ ὢν καὶ ὁ ἦν καὶ ὁ ἐρχόμενος; the subjunctive is wholly absent.

b) *Modification of the Initial Vowel* when the basis has no initial consonant. Initial $\acute{\alpha}$ -, $\alpha\upsilon$ -, $\alpha\iota$ -[ε], $\acute{\epsilon}$ -, $\epsilon\upsilon$ - are modified resp. to $\acute{\eta}$ -[e], $\acute{\eta}\upsilon$ -[ew], $\acute{\eta}$ -[e], $\acute{\eta}$ -[e], $\eta\upsilon$ -[ew]: $\acute{\eta}\chiουον$ ($\acute{\alpha}\chiούω$), $\eta\upsilonλίζον$ ($\acute{\alpha}\upsilonλίζω$) etc. The following vowels are, however, not modified: ι -, $\epsilon\iota$ -[i], $\acute{\eta}$ -, $\acute{\omicron}$ -[o], υ -, $\acute{\omega}$ -[o]; initial $\alpha\iota$ - and $\epsilon\upsilon$ - remain sometimes unaltered: 2 Tim I. 16 $\acute{\epsilon}\piαισχύνθη$, Mark I 11 $\epsilon\upsilonδόκησα$. In the N.T. initial $\omicron\iota$ - is incidentally modified to $\acute{\phi}$ -, which may indicate that $\omicron\iota$ was still [oj] and not yet [ü], as υ - was not modified.

The *Active Pluperfect* is the only past indicative in which the value of past time is correlated with three form differences as opposed to the non-past indicative (*i.e.* the perfect indicative):

1) $\acute{\epsilon}$ - prefixed, coming here before the reduplicated syllable *e.g.* $\acute{\epsilon}\pi\epsilon\piαιδευκεις$ vs. $\pi\epsilon\piαιδευκας$. If the perfective basis is characterized as such not by reduplication, but by modification of initial vowel or by $\acute{\epsilon}$ - prefixed to initial consonant group, *e.g.* $\acute{\epsilon}\sigmaτροφας$, $\acute{\eta}\lambdaλαχας$, no second modification is carried through and no second $\acute{\epsilon}$ - is prefixed in the pluperfect: $\acute{\epsilon}\sigmaτρόφεις$, $\acute{\eta}\λλάχεις$.

2) -ει- added to the perf. basis: $\acute{\epsilon}$ - $\pi\epsilon\piαιδευκ$ -ει-ς vs. $\pi\epsilon\piαιδευκα$ -ς

3) Special Personal Endings found in the Past Indicatives only (see 11.3.2.).

Remarks. In Compounds the prefixed $\acute{\epsilon}$ - (or $\acute{\eta}$ -) follow upon the compositional prepositions: $\acute{\alpha}\piολούμεν$ — $\acute{\alpha}\piελούμεν$. Likewise the modification of the initial vowel affects only the non-prepositional element: $\acute{\alpha}\piαλλάσσομεν$ — $\acute{\alpha}\piηλλάσσομεν$. Exceptions to this rule are found mainly in verbs which though originally being compounds are no longer felt as such *e.g.* Jer. II 8 $\acute{\epsilon}\piροφήτευνον$, Mark I 34 $\acute{\eta}\phiιεν$ ($\acute{\alpha}\phiίω$, $\acute{\alpha}\phiίημι$). A double augment is rare in the N.T. writings *e.g.* Mark VIII 25 $\acute{\alpha}\piεκατέστη$, but the Apocryphal Acts of the Apostles contain more examples.¹

In the Hellenistic period the augment was often omitted in pluperfects *e.g.* Mark XV 7 $\pi\epsilon\piοιήκεισαν$; probably it was sufficiently characterized as a past tense by the form differences 2) and 3).

B. Unproductive Types

a) $\acute{\eta}$ - or $\acute{\epsilon}$ - is prefixed in the past indicatives of $\theta\acute{\epsilon}\lambdaω$, $\mu\acute{\epsilon}\lambda\lambdaω$, $\betaούλομαι$ and $\deltaύναμαι$ *e.g.* Apc. X 4 (A) $\eta\mu\epsilon\lambda\lambdaον$, but III 2 (A) $\epsilon\mu\epsilon\lambda\lambdaον$; V 3 (A) $\eta\deltaυνατο$, but $\epsilon\deltaυνα$ - in VII 9; XIV 3; XV 8.²

¹ M. Bonnet, *Acta Apostolorum Apocrypha*, Hildesheim 1959, II-2, p. 364 (index).

² With other verbs $\acute{\eta}$ - was rare *cf.* Mayser, *o.c.*, I-2, pp. 93-94. It is curious that the four verbs mentioned are the ones that can serve as auxiliary

b) ἐ- is prefixed to initial vowels in the past indicatives of ὄρω, κατάρνυμι, ἀνοίγω, ὠνοῦμαι: ἑώρων, κατέαξα, ἀνέωξα, ἐωνούμην

c) Modification of initial ἐ- to εἰ- not to ἦ- occurs in the past indicatives of ἔχω, αἶρω (fut. ind. ἐλῶ), ἐῶ, ἔλκω, ἐργάζομαι: εἶχον, εἰλόμην, εἶων, εἶλκον, εἶργαζόμην.

11.3.9.1. *Forms of the Categories of Mood.* The form differences between the moods vary according to the subsystem which the latter constitute: durative or aoristic. From our charts it will appear that the bases as postulated for the description of the different indicatives are in either subsystem identical to those of the imperative, infinitive and participle. The form differences between these four coincide therefore with the bases postulated and the different endings shown in the chart.¹ It will then suffice to describe in what ways the remaining moods, the subjunctives and optatives are opposed to the indicative bases.

In the productive verb classes the subjunctive and optative bases can be formed by the addition of the elements shown in the diagram below to a nucleus. The latter may be found by subtracting from the verbs as mentioned the endings -ω/ῶ, -α, -ην and the prefix ἐ-:

		type of indicative	subjunctive	optative
durative		1. παιδεύω 2. νικῶ/ἀνιῶ 3. φιλῶ 4. δουλῶ	-ω/-η -ῶ/-ᾶ -ῶ/-ῆ -ῶ/-οῖ	-οι -ώη/-ῶ -οίη/-οῖ -οίη/-οῖ
aoristic	active-middle	1. ἐπαιδεύσα (and 2, 3, 4)	-ω/-η	-αι
	passive	1. ἐπαιδεύθην (and 2, 3, 4)	-ῶ/-ῆ	-εῖη/-εῖ

verbs. We may also remark here that according to G. H. A. Ewald, *Commentarius in Apocalypsin Johannis exegeticus et criticus*, Leipsic 1828, p. 43, compounds like ἀποβάλλω are infrequent in the Apc. because Hebrew lacks compound verbs. We count 189 non-compounds against 48 cpds., of which 10 have no simplex counterpart in the N.T.

¹ The only exceptions are the bases of the ptc. pass. aor. παιδευθει- (when followed by [s]: παιδευθείς, παιδευθεῖσιν, παιδευθείσα), and παιδευθε- (when followed by [-nt-]), and in the unproductive types the participles of the root aorists βᾶς, βᾶσα, βάν, and γνούς (gen. sg. γνόντος, dat. pl. γνοῦσιν), γνοῦσα, γνόν.

It appears then that there are two types of subjunctive, namely a) -ω/-η, b) -ῶ/-οῖ (the latter in type 4. δουλῶ). In type 2. νικῶ-άνιῶ the subjunctive is identical in form to the durative indicative, and there was a tendency to use—on the analogy of this identity—the durative indicative of 4. δουλῶ likewise as a subjunctive. After the phonetic change of η[e] to [i] by 150 A.D. the durative indicative παιδεύω, -εις and the subjunctive παιδεύω, -ης tended also to be unified: the identity is a fact in Modern Greek, where, however, the aorist indicative and subjunctive are still different in form.¹

Unproductive Classes. Type 5. λαμβάνω-ἐλαβον. The formation of the durative and aoristic subjunctive and optative is similar to that of the *durative* subj. and opt. of type 1. παιδεύω: subj. dur. λαμβάνω, -ης, subj. aor. λάβω, -ης, opt. dur. λαμβάνοιμι, opt. aor. λάβοιμι.

Type 6. βαίνω-ἔβην. The subjunctives/optatives of the root aorists are: βῶ, βῆς, βαίην, γνῶ, -ῶς or -οῖς, γνῶην or γνοίην.²

Type 8. τίθημι. The durative subjunctives are in -ω/-η- or -ῶ/-ῇ- with the exception of (δι)δῶ, -ῶς which tended to go over to (δι)δῶ, -οῖς (cf. type 4. δουλῶ). Hence: τιθῶ (aor. subj. θῶ), ἰστῶ (στῶ and στήσω), ἀφιῶ (ἀφῶ), δεικνύω (δείξω), δύνωμαι (δυνηθῶ), ῶ. The optatives are resp. τιθείην (θείην), ἰσταίην (στήσαιμι, σταίην), ἀφιείην (ἀφείην), διδοίην or διδῶην (δοίην, δῶην), δεικνύοιμι (δείξαιμι), δυναίμην (δυνηθείην), εἶην.

II.3.II. *Productive Formation of the Durative, Aoristic and Futural Bases.*

Introduction. We shall represent the formation of these bases by a formula in which "N" indicates the stem or nucleus, "A" the prefix or modification correlated with the value of past time or augmentum, "E" the personal ending or the infinitive or participial ending, while the differences in form that are correlated with the different values of the subsystems, are shown in phonetic transcription. As examples we shall give: a) the present indicative, b) the active aorist ind., c) the passive aorist ind., d) the active future indicative.

¹ In later times νικῶην, φιλοίην and δουλοίην tended to be unified by the introduction of φιλόην, δουλόην, cf. Blass-D., *o.c.*, *par.* 95.2.

² The subj. γνῶς in Apc. III 3 (A, C, 025) but **Ν**, 046 have here the ita-cistic γνωση, 104 *etc.* more correctly γνωσει (fut. ind.). Compare at VIII 3 δωση (025, 046), δωσει (A, C, **Ν**).—The subj. and opt. of the obsolete root aorists were resp.: ἔφθην—φθῶ, -ῆς (φθαίην), ἐβίων—βιῶ, -ῶς (βιοίην), ἐάλων—άλῶ, -ῶς (ἀλοίην), ἔδυν—δύω, -ης (no opt.), ἔφυν—φύω, -ης (no opt.), ἀπέδραν—ἀποδρῶ, -ᾶς (-δραίην). Perf. οἶδα—εἰδῶ [idó], -ῆς (εἰδείην), but aor. εἶδον—ἴδω[idó].

Type 1. παιδεύω. Here we must distinguish between four subtypes:

I. N ends in vowel, diphthong, ζ [z], or dental explosive:

παιδεύω (N: παιδευ-)

II. N ends in velar explosive (often not visible in pres. ind.):

πράσσω (N: πρακ-)

III. N ends in labial explosive (in pres. ind. often followed by -τω):

καλύπτω (N: καλυπ-)

IV. N ends in ν[n], ρ[r], or λ[l]:

μιαίνω (N: μιαν-)

I. a) N-o/ε/i/u-E, b) A-N-sa/σε-E, c) A-N-the -E, d) N-so/σε/si/su-E. If N ends in ζ or dental expl. these are dropped before σ [s], but modified to [s] before θ [th] e.g. κτίζω—ἐκτίσα—ἐκτίσθην, πείθω—ἐπείσα—ἐπείσθην. The Classical Attic fut. ind. κτιῶ, κτιεῖς, etc. (pres. ind. κτίζω) has been normalized to κτίσω; in the N.T. it still occurs in LXX-quotations and in four non-quotations.

II. a) N (minus [k])-so/σε/si/su-E, b) A-N-sa/σε-E, c) A-N-the-E, d) N-so/σε/si-su-E. Final [k] of N is seemingly modified to χ[kh] before [th] in ἐπράχθην etc., but this modification is only orthographical, the phonetic value being [εprákthen].

III. a) N-to/τε/ti/tu-E, b) A-N-sa/σε-E, c) A-N-the-E, d) N-so/σε/si/su-E. Final [p] of N is seemingly modified to φ [ph] before [th] in ἐκαλύφθην etc., but this modification is likewise orthographical; the phonetic value is [εkalúpthen]

IV. a) N with (modification of α[a] to αι[ε])-o/ε/i/u-E, b) A-N-a/ε-E, c) A-N-the-E, d) N-o/i/u-E.

The conjugation of the active and middle aorist is not different from that of ἐπαίδευσα, -σάμην, while the future indicative is conjugated like a present indicative of type 3. φιλῶ. If the middle vowel of N—as found in the future indicative—is either α or ε these vowels are modified resp. into αι[e] and ει[i] in the durative and aoristic tenses according to the scheme below.

It must be kept in mind that the number of these verbs is low (not more than ten of each kind) with the exception of those in -αίνω (275 non-compounds in Classical and Koine Greek together). No rule can be given for the occurrence of the pass. aorist without -θ-; moreover, there may be further peculiarities such as the loss of final -ν- (of N) in the pass. aor. (and in the perfect) (see *par.* II.3.14). Incidentally the older modification to -η- may be found in the aorist instead of -α-.

fut.ind.act.	durative	aor.ind.act.	aor.ind.pass.	
			with mono-syllabic stem	with poly-syllabic stem
σφαλῶ	σφάλλω	ἔσφαλα	ἔσφάλ(θ)ην	—
ἀγαλῶ	ἀγάλλω	(ἡ)γάλα	—	ἡγάλθην
φανῶ	φαίνω	ἔφανα	ἔφάν(θ)ην	—
μιανῶ	μιαίνω	ἐμίανα	—	ἐμιάνθην
ἄρῶ	αἴρω	ἤρα (subj. ἄρω)	ἤρθην(ἄρθῶ)	—
καθαρῶ	καθαίρω	ἐκάθαρα	—	ἐκαθάρθην
στελῶ	στέλλω	ἔστειλα	ἔστάλ(θ)ην	—
ἀγγελῶ	ἀγγέλλω	ἡγγειλα	—	ἡγγέλ(θ)ην
κτενῶ	κτείνω	ἔκτεινα	ἐκτάν(θ)ην	—
σπερῶ	σπείρω	ἔσπειρα	ἐσπάρην	—
ἐγερῶ	ἐγείρω	ἡγείρα	—	ἡγέρθην

Types 2. νικῶ/ἀνιῶ, 3. φιλῶ, 4. δουλῶ.

In the aorists and future the same formula may be used as for type 1. παιδεύω with the proviso that N represents here resp. νικη/ἀνια, φιλη, δουλω. The corresponding duratives are formed on the basis of N minus its final vowel: νικ-/ἀνι-, φιλ-, δουλ-, indicated by “N(-)”, to which are added different vocalic elements:

t. 2. N(-) -o/a-E, t.3. N(-)-o/i/u-E, t.4. N(-)-o/ü/u-E. The subclasses 2-a. νικῶ (νικη) and 2-b. ἀνιῶ (ἀνια) depend on the phoneme preceding final -ῶ: 2-a. all consonants (except ρ), ο or υ; in 2-b. only: ε, ι, and ρ. Hence we get: νικῶ-ἐνίκησα, βοῶ-ἐβόησα, ἐγγυῶ-ἡγγύησα, ἐῶ-εἶσα, ἀνιῶ-ἡνίασα, ὀρῶ-(pf. ἐόρακα).

II.3.12. *The Productive Formation of the Perfective Basis:*

II.3.12.1. *Introduction.* The productive procedure may be represented by starting from the formula: active P - N - S - E/ middle P - N - E, in which P stands for a prefixed element or for initial modification, N for the stem or nucleus, which may be compositional except for the fact that the first component cannot be a preposition, while S indicates a suffixed element, and E the personal, infinitive or participial ending. The form of P depends on the first phoneme of N, the form of S on the final phoneme of N, while the presence or absence of S depends in its turn on E. If S is absent certain modifications may occur at the juncture of N and E. All this implies the necessity of three sets of rules in order to describe these various interdependencies. In compounds with a prepositional head P comes after the preposition, except when the compound is as such not transparent because the simplex is

no longer used *e.g.* καθίζω-κεκάθικα (Hebr. XII 2). Otherwise the formula for compounds is: Prep. -P - N - (S) - E, for instance: pres. ind. ἀναλύεις -pf. ind. ἀνα-λέ-λυ-κα-ς.

II.3.I2.2. *The Formation of the Perfective Prefix. (P).* With regard to the first phoneme of N four cases are to be distinguished:

a) N has initial single consonant (except ζ) followed by a vowel, or an initial consonant cluster consisting of an explosive plus λ, μ, ν, ρ (except γν-). Under these conditions P consists of the initial consonant of N followed by the vowel -ε-, with the proviso that θε-, φε-, χε- cannot be prefixed but are replaced by τε-, πε-, κε- (according to the morphonological restriction discussed in *par.* 4.3). Hence we get: παιδεύω-πεπαίδευκα, νικῶ-νενίκηκα, φιλῶ-πεφίληκα, κλίνω-κέκλικα, πράσσω-πέπρακα, χρίω-κέχρικα.

For verbs with initial ζ- or γν- see under b). The former exception βλαστάνω-ἐβλάστηκα has been replaced by βλαστάνω-βεβλάστηκα (Plut. 2.684c and Joel II 22), but κέκτημαι still occurs in LXX and Apostolic Fathers.

b) N has initial ζ-, γν-, or a consonant cluster consisting of explosive plus explosive, explosive plus [s], [s] plus explosive, [s] plus [m], or a cluster of three consonants. Under these conditions P has the form ἐ-, for instance ζητῶ-ἐζήτηκα, γνωρίζω-ἐγνώρικα (Plato *Phdr.* 262b), πτώ-ἐπτuka, ψεύδομαι-ἔψευσμαι, στέλλω-ἔσταλακα, σμῆχω-ἔσμηγμένος (if σμ is [zm] also ἐ-: ἐζμηγμένος (P.S.I. 10. 1180, 48: III A.D.)—pres. ind. σμῶ, -ᾶς), στρέφω-ἔστροφα or ἔστραφα. If N has ρ- or μν- the perfect wavers: Matt. IX 36 ἑρριμμένοι—D* ρεριμμενοι, Luke I 27 **, B* ἐμνηστευμένην—C, Θ μεμνησ-τευμένην.^{1, 2}

c) N has initial vowel α or ά, both [a], ε or έ, both [ε], αι or αί, both [ε], or an initial diphthong αυ [aw], ευ or εύ both [εw]. Under these conditions P has the form η[e] which replaces the initial single vowels and the initial α and ε of the diphthongs: ἀλλάσσω-ἡλλαχα, ἐτοιμάζω-ἡτοίμακα, ἀνλίζομαι-ἡύλισμαι, εὐρίσκω-ἡύρηκα. Incidentally initial ευ- may remain unmodified *e.g.* εὐρήκαμεν (John I 41), εὐρηκα (Apc. III 2).

d) N has an initial vowel which is not [a(w)] or [ε(w)]. In this

¹ Compare Judith VI 13 ἑρριμμένον (A: ρεριμμενον), and Deut. XXII 23 μεμνηστευμένη (A: εμνηστευμενη).

² A number of verbs with initial ά-, ό-, οι-, ώ- likewise had this prefix ἐ-: κατάγνυμι—κατέαγα, ώθῶ, -εῖς, —ξωκα, ώνοῦμαι—έώνημαι. This ἐ- tended to disappear or to be extended to other tenses *e.g.* fut. ind. κατεάξω, άπεώσομαι. Only όρώ—έόρακα kept being used.

case P is zero *e.g.* ἡβῶ-ἡβηκα, εἰκάζω-εἴκακα, ἰῶμαι-ἴαμαι, ὕγιαζω-ὕγιακα.¹

11.3.12.3. *The Formation of the Perfective Suffix (S).* The perfective suffix is present in the active categories only. Its form depends on the final phoneme of N. Two cases are to be distinguished:

a) N ends in a vowel, a diphthong, or λ, ν, ρ, ζ. In this case S is respectively -κα- (pf. ind. except 3rd p. sg.), -κε- (pf. ind. 3rd p. sg. πεπαίδευκεν, and pf. infinitive πεπαίδευκέαι), -κ- (pf. ptc. πεπαίδευκώς, -ός, -υῖα), and -κει -[ki] (in the pluperfect ἐπεπαίδευσκειν). Final ν[n] of N is modified before [-k-] to [ŋ], while final [z] and dental explosive are dropped before [-k-]. In this way are formed the perfects of the verbs of type 1. παιδεύω that answer the conditions, as well as all the verbs of types 2. νικῶ/ἀνιῶ, 3. φιλῶ and 4. δουλῶ, for instance: λούω-λέλουκα, παιδεύω-πεπαίδευκα, ἀγγέλλω-ἡγγελκα, μιαίνω-μεμίαγκα, πείθω-πέπεικα, and νενίκηκα, ἡνίακα, πεφίληκα, δεδούλωκα.

b) N ends in a velar or labial explosive. In this case S consists of the modification of the final explosives resp. into χ [kh] and φ [ph], and the addition of -α/-ε/-zero/-ει-[i] (*cf.* sub a): the distribution of -κα-, -κε-, -κ-, -κει-). According to this procedure are formed the perfectives of those verbs of type 1. παιδεύω, which answer the above mentioned conditions, namely the verbs of the subtypes πράσσω and καλύπτω: pf. ind. πέπραχα, κέκαλυφα. In the pres. ind. of these verbs the explosive may be absent (in πράσσω), or may be followed by the durative suffix [-to] *etc.* (in καλύπτω, see *par.* 11.3.11), but compare the other tenses: ἔπραξα, πράξω, ἔκαλυψα, καλύψω, *etc.* Verbs of which the pres. ind. shows a velar explosive or a labial explosive followed by [-o/-ε-] *etc.* instead of [-to/-τε-] *etc.* are for instance: λέγω-λέλεχα (Galenus 16, 249, but usually the suppletion εἶρηκα is found), διώκω-δεδίωχα, ἄρχω-ἤρξα, τρίβω-τέτριφα, τρέπω-τέτροφα, γράφω-γέγραφα.

11.3.12.4. *The Formation of the Medio-Passive Perfectives.* In the medio-passive voice N is immediately followed by E, because S is here always absent. This results in modifications, both in E and the final phoneme of N. Three cases have to be distinguished:

a) N ends in vowel or diphthong: neither N nor E are modified: πεπαίδευμαι.

¹ Some verbs with initial ἐ- modify to εἰ-[i]: ἔλκω—εἴλκυκα, ἐλκῶ, -οῖς—εἴλκωμαι.

b) N ends in ζ [z] or dental explosive: these consonants are dropped before [s]: *πείθω-πέπειςαι-πέπεισθε* (also in the obsolete future perfect: *πεπέισομαι, etc.*), and they are replaced by [s] before [m] and [t]: *γυμνάζω-γεγύμνασμαι-γεγύμνασται*. The 3rd p. pl. is replaced by the periphrasis participle plus *εἰσίν/ῆσαν* e.g. *γεγυμνασμένοι εἰσίν*.

c) N ends in a labial or velar explosive, or in [l], [n], [r]. The labial explosives and [n] are dropped before [m], and written -μμ- i.e. [-m-] e.g. *καλύπτω-κεκάλυμμαι, φαίνω-πέφαμμαι*; the velar explosives appear as γ [g] before [m]: *πράσσω-πέπραγμαι, διώκω-δεδιωγμένος*.

Before [s], [t], [th] the labial and velar explosives appear respectively as [p] and [k], written: -ψ-, -ξ-, -πτ-, -κτ-, -φθ- and -χθ-. The modification in the latter two is only orthographical, their phonetic values being [pth] and [kth]. Of monosyllabic liquid stems the middle vowel is modified to α: *κείρω-κέκαρμαι, ἀποκτένω-ἀπέκταμμαι*, but *ἀγγελλω-ἡγγελμαι*.

Moreover the endings -σθε, -σθαι, -σθω and -σθωσαν are replaced by resp. -θε, -θαι, -θω and -θωσαν, while here again the 3rd p. pl. is replaced by participle plus *εἰσίν/ῆσαν*. Hence we get: *πράσσω-πέπραχθε, καλύπτω-κέκαλυφθε, μιαίνω-μεμίανθε, πεπραγμένοι εἰσίν*, but the perfect of subtype *μιαίνω* has a 3rd p. pl.: *Titus I 15 μεμίανται αὐτῶν καὶ ὁ νοῦς καὶ ἡ συνείδησις* (Vulgate: *inquinatae sunt*) cf. *Phalaris Ep. 121, 2* (VI B.C.).

II.3.13. *Unproductive Formation of Bases.*

Type 5 λαμβάνω-ἐλαβον. This heading comprises all those verbs (c. 35) that have a so-called "2nd aorist" in -ον (middle -όμεν). In the Hellenistic period these were gradually modified into aorists ending in -α or -σα, e.g. *ἤνεγκον, ἦλθον, ἔλαβον, ἔβαλον* into *ἤνεγα, ἦλθα, ἔλαβα, ἔβαλα*, and *ἠῦρον, ἔκραγον, ἤμαρτον, ἔβλαστον* into *εὔρα or εὔρησα* (Manetho Astr. 5, 137: IV A.D.), *ἔκραξα* (Apc. X 3), *ἡμάρτησα, ἐβλάστησα*.¹ As opposed to these aorists the duratives are formally characterized in different ways, which will constitute the basis of our subdivision below. The oppositions to the passive aorists, the futures and to the perfectives are usually less conspicuous and consist mainly in differences in vocalism (by the side of the regular differences in ending). In the following list we mention

¹ By the side of *ἔκραξα* (e.g. Apc. VI 10, A) also *ἐκέκραξα* (Apc. XVIII 2, A).—In the N.T. imperfects only seldom adopted such an α-vowel, the only instance in the Apc. being IX 8 [εἰ]χαν (A, Ⲅ).

instead of the present indicative the imperfect because it brings out more clearly what the essential form difference is like. The abbreviations "t. 2" and "t. 3" indicate that the verb in question is conjugated like the pres. ind. νικῶ or φιλῶ.

a) With infix -v-:

ἐδάκνον	—	ἐδάκον	—	ἐδήχθην	—	δήξω	—	δέδηχα	—	δέδηγμαι
ἐκαμνον	—	ἐκαμον	—	—	—	καμοῦμαι	—	κέκμηκα	—	—
ἐτεμον	—	ἐτεμον	—	ἐτμήθην	—	τεμῶ (t. 3)	—	τέτμηκα	—	τέτμημαι
ἐπινον	—	ἐπινον	—	ἐπόθην	—	πιομαι	—	πέπωκα	—	πέπομαι ¹
ἀφικνούμην	—	ἀφικόμην	—	—	—	ἀφίξομαι	—	—	—	—

b) With infix -αν-:

ἡμάρτανον	—	ἡμαρτον	—	ἡμαρτήθην	—	ἡμαρτήσομαι	—	ἡμάρτηκα	—	ἡμάρτημαι
ἐβλάστανον	—	ἐβλαστον	—	—	—	βλαστήσω	—	βεβλάστηκα	—	—
ἀπηχθάνομην	—	ἀπηχθόμην	—	—	—	ἀπεχθήσομαι	—	—	—	ἀπήχθημαι
ἡσθάνομην	—	ἡσθόμην	—	—	—	αἰσθήσομαι	—	—	—	ἡσθημαι

c) With two infixes: -v-/-μ -/-γ- and -αν-:

ἐλάγγανον	—	ἐλαχον	—	ἐλήχθην	—	λήξομαι	—	εἴληχα	—	εἴληγμαι
ἐλάμβανον	—	ἐλαβον	—	ἐλήμφθην	—	λήμψομαι	—	εἴληφα	—	εἴλημμαι
ἐλάνθανον	—	ἐλαθον	—	—	—	λήσω	—	λέληθα	—	(ἐπι-)λέλησμαι
ἐμάνθανον	—	ἐμαθον	—	—	—	μαθήσομαι	—	μεμάθηκα	—	—
ἐπυνθάνομην	—	ἐπυθον	—	—	—	πέυσομαι	—	—	—	πέπυσμαι
ἐτύγγανον	—	ἐτυγον	—	—	—	τεύξομαι	—	τετύχηκα, τέτυχα	—	οἱ τέτυχα ²
ἐθίγγανον	—	ἐθιγον	—	—	—	—	—	—	—	—

Hellenistic innovations according to this model are: -ελίμπανον in compounds e.g. Acts XVII 13 (D) διελίμπανον, which replaces -έλειπον undoubtedly because the latter had become phonetically identical to the aorist, and ἐπάνθανον listed by the Etymologicum Magnum (98, 46) instead of ἔπασχον (see sub d) as the durative opposed to the aorist ἔπαθον.

d) With infix (or suffix) -(ι-)σκ- or -σκω:

ἡῤῥισκον	—	ἡῤῥον	—	ἡῤῥέθην	—	εῤῥήσω ³	—	ἡῤῥηκα	—	ἡῤῥημαι
ἀπέθνησκον	—	ἀπέθανον	—	—	—	ἀποθανοῦμαι (t. 3)	—	τέθνηκα ⁴	—	—
ἔπασχον	—	ἐπάθον	—	—	—	πέισομαι	—	πέπονθα	—	—

¹ The classical aor. imperative πῖθι has now been replaced by πῖε.

² Heb. VIII 6 resp. *ms.* P, A, B. Cf. Job VII 2 τετευχώς (A: τετυχηκώς).

³ At Apc. XVIII 14 *ms.* 051 (dated IX-X A.D.) has ευρησης, an itacism for which other *mss.* have ευρησεις (but A, C, **N** have ευρησουσιν); it is therefore not the subjunctive corresponding to the new aorist εὔρησα.

⁴ The ptc. is always τεθνηκώς in the N.T., the inf. is τεθνηκέναι in Acts XIV 19, but *mss.* D, E have here the older τεθνάναι. In the LXX the latter occurs only in 4 Macc. IV 22, elsewhere τεθνηκέναι.

In *ἐπασχον* the aspiration in *-χ-* has been taken over from *-θ-* of *-παθ-* which had to be dropped before *σ[s]*.

e) Various differences which sometimes leave only a vague similarity between durative and aorist:

ἐγινόμην	—	ἐγενόμην	—	ἐγενήθην	—	γενήσομαι	—	γέγονα	—	γεγέννημαι ¹
ἔφευγον	—	ἔφυγον	—	—	—	φεύξομαι	—	πέφευγα	—	—
ἔπιπτον	—	ἔπεσον	—	—	—	πεσοῦμαι	—	πέπτωκα	—	—
(t. 3)										
ἔτικτον	—	ἔτεκον	—	ἐτέχθην	—	τέξομαι	—	τέτοκα	—	—
εἶχον(ἔχω)	—	ἔσχον	—	ἐσχέθην	—	ἔξω	—	ἔσχηκα	—	—
ἤγον(ἄγω)	—	ἤγαγον	—	ἤχθην	—	ἄξω	—	ἤχα, ἀγή(γ)οχα	—	ἤγμαι
ἐβαλλον	—	ἔβαλον	—	ἐβλήθην	—	βαλῶ (t. 3)	—	βέβληκα	—	βέβλημαι
ἔλειπον	—	ἔλιπον	—	ἐλείφθην	—	λείψω	—	λέλοιπα	—	λέλειμμαι ²
ἐκραζον	—	(ἀν)ἔκραγον	—	—	—	κράξω	—	κέκραγα	—	—
(Luke XXIII 18)										

f) Defective paradigms (suppletive categories are in brackets):

(αἰρῶ) (t. 3)	—	εἶλον	—	(ἡρέθην)	—	ἔλῶ (t. 3)	—	(ἡρηκα)	—	(ἡρημαι)
(ἔρχομαι)	—	ἤλθον	—	—	—	ἐλεύσομαι	—	ἐλήλυθα	—	—
(ἐσθίω)	—	ἔφαγον	—	(ἐβρώθην)	—	φάγομαι	—	(βέβρωκα)	—	(βέβρωμαι)
(όρω) (t. 2)	—	εἶδον	—	(ώφθην)	—	(ὄψομαι)	—	(έόρακα)	—	(ώμμαι)
(φέρω)	—	ἤνεγκον	—	ἤνέχθην	—	(οἶσω)	—	ἐνήνοχα	—	ἐνήνεγμαι
(λέγω)	—	εἶπον	—	(ἐρρέθην)	—	(ἐρῶ) (t. 3)	—	(εἵρηκα)	—	—
(τρέχω)	—	ἔδραμον	—	—	—	δραμοῦμαι	—	δεδράμηκα	—	—

Type 6. βαίνω-ἔβην.

This heading comprises the few verbs of which the paradigm contains a so-called "root aorist":

βαίνω	—	ἔβην	—	—	βήσομαι	—	βέβηκα	—	—
γινώσκω	—	ἔγνων	—	ἐγνώσθην	—	γνώσομαι	—	ἔγνωκα	—
								ἔγνωσμαι	

In Classical Attic the latter had present reduplication: *γινώσκω*, but just as in *γίνομαι* (see sub *e*) the group [gign-] has been simplified to [gin-] undoubtedly via [gign-]. The further aorists of this kind *ἔφθην*, *ἔάλων*, *ἔβίων*, *ἀπέδραν*, *ἔφυν*, *ἔδυν* (pres. ind. *φθάνω*, *άλισκομαι*, *(ζῶ)*, *ἀποδιδράσκω*, *φύομαι*, *δύομαι-δύνω*) may still occur in Atticistic writings, but are otherwise obsolete or have been replaced resp. by *ἐφθασα* (Matt XII 28) *ἐβίωσα* (1 Pet. IV 2), *ἀπέδρασα* (Judith XI 3, 8), or *ἀπέδρων*, *-ας* (Judith XI 3 and 16,

¹ By the time when geminate consonants did no longer occur phonetically, *ἐγενήθην* and *γεγέννημαι* could not be distinguished from *ἐγεννήθην*, *γεγέννημαι* (of the verb *γεννῶ*, *-ᾱς*) see e.g. 2 Pet. II 12.

² The forms *ἐβαλα*, *-ελίμπανον*, *-έλειψα* are undoubtedly to be seen as attempts to avoid the phonetic equivalence of imperf. and aor.

like imperf. ἐνίκων), ἐφύην (Luke VIII. 6, 8), ἔδυσα (Mark I 32 : B, D, but ἔδυ **κ**, A) or -εδύην (Jude 4 : B).

Type 7. ἀκούω-ἀκήκοα.

In the paradigm of a limited number of verbs which have an initial vowel phoneme and are further conjugated like type 1. παιδεύω there occurs a specific type of perfect formed by the repetition of the initial vowel and the following consonant(s) of the stem N (see *par.* 11.3.12.1), combined with modification of initial α and ε into η in the second part of the reduplication. In this way are formed: ἀκούω-ἀκήκοα, ἀλῶ,-εῖς,-ἀλήλεσμαι, ἐγείρω-ἐγρήγορα (obsolete and replaced by the new verb γρηγορῶ, -εῖς (Apc. III 2), aor. ἐγρηγόρησα (Apc. III 3), middle ἐγήγερμαι (e.g. 1 Cor. XV 4), ἐλαύνω-ἐλήλακα, ἐλήλα(σ)μαι, ἐλέγχω-ἐλήλεγμαι, ὀρύσσω-ὀρώρυχα, ὀρώρυγμαi. Compare in type 5. λαμβάνω: ἄγω-ἀγή(γ)οχα, and the defective ἤνεγκον, ἤνεχθην-ἐνήνοχα, ἤλθον-ἐλήλυθα, and in the following type 8. τίθημι: ὀλλυμι- transit. ὀλώλεκα, intrans. ὀλωλα, ὀμνυμι-ὀμώμοκα, ὀμώμο(σ)μαι. The latter three, however, may also be classed as belonging to this type 7, because the corresponding duratives were being replaced as we have already seen by ὀλλύω and ὀμνύω.¹

Type 8. τίθημι. Here again the most conspicuous opposition is from the formal point of view that between duratives and aorists. The remaining tenses may be quite normal; once we know for instance, that to the duratives δείκνυμι, μείγνυμι, ζεύγνυμι, πηγνυμι, ῥήγνυμι there correspond the aorists ἔδειξα, ἔμειξα, ἔζευξα, ἔπηξα, ἔρρηξα, it is no surprise that the remaining tenses are ἔδείχθην, δείξω, δέδειχα, δέδειγμαi, etc.² According to the kinds of duratives we may subdivide into verbs with present reduplication and verbs with -νυ- (or -υ-).

1) The procedure of present reduplication is similar to that of forming the perfective prefix P), but here the vowel is [ι]: τίθημι, δίδωμι, ἀφίημι (simplex ἵημι from *jijemi) with aorist in -κα: ἔθηκα, ἔδωκα, ἀφῆκα. To this kind formerly belonged: ἵστημι (from *sistemi), aor. ἔστησα (transit.) or ἔστην (intrans. root aorist);³ ὀνίνημι-ὠνησα has 'inner' reduplication; πί(μ)πρημι and πί(μ)πλημι have reduplication and an -ν-, which tended to disappear.

¹ The middle perfects tended to be simplified e.g. to ἤνεγμαi, ὠμοσμαι, ὀρυγμαi, see R. Helbing, *Grammatik der Septuaginta*, Göttingen, 1907, p. 81.

² Instead of the pass. aor. in -θην the following were, however, more commonly used: ἐζύγην, ἐμίγην, ἐπάγην, ἐρράγην.

³ The root aorist ἔσβην (of σβέννυμι) is now obsolete.

2) suffix -νυ- or -υ- : δείκνυμι, ὄμνυμι, ὀλλυμι, aorist in -σα : ἔδειξα, ὥμοσα, ὥλεσα (but middle ὠλόμην: 2nd aorist). The further tenses of these verbs are as follows:

τίθημι	—	θῆκα	—	έτέθην	—	θήσω	—	τέθεικα	—	τέθειμαι
δίδωμι	—	έδωκα	—	έδόθην	—	δώσω	—	δέδωκα	—	δέδομαι
ἀφίημι	—	ἀφῆκα	—	ἀφέθην	—	ἀφήσω	—	{ἀφεῖκα, ἀφέωκα	—	ἀφέωμαι
ἵστημι	—	ἔστησα, ἔστην	—	έσταθην	—	στήσω	—	{ἔστακα (tr.) ἔστηκα (intr.) ¹	—	ἔσταμαι
ὀνίνημι	—	ὠνήσα, ὠνήμην	—	—	—	ὀνήσω	—	—	—	—
πίμπλημι	—	έπλησα	—	έπλήσθην	—	πλήσω	—	πέπληκα	—	πέπλησμαι
πίμπρημι	—	έπρησα	—	έπρήσθην	—	πρήσω	—	πέπρηκα	—	πέπρησμαι
κεράννυμι	—	έκράσα	—	έκράσθην	—	κεράσω	—	—	—	κεκέρασμαι

and so the other verbs in -άννυμι, -έννυμι, -ώννυμι, but in the pass. aor. and middle perfect the -σ- may be absent: στρώννυμι—ἔστρωμαι, ἔστρώθην.

πήγνυμι	—	έπηξα	—	έπάγην	—	πήξω	—	πέπηγα	—	—
ῥήγνυμι	—	έρρηξα	—	έρράγην	—	ῥήξω	—	{έρρωγα (e.g. Joshua IX 13) έρρηγα (Job XXXII 19)	—	—
κατάγνυμι	—	κατέαξα	—	κατεάγην	—	κατεάξω(!)	—	κατέαγα	—	κατέαγμαι
ὄμνυμι	—	ὥμοσα	—	ὠμό(σ)θην	—	ὀμόσω	—	ὀμώμοκα	—	ὀμώμο(σ)μαι
(ἀπ-)όλλυμι	—	{ὥλεσα, ὠλόμην	—	—	—	ὀλέσω	—	{ὀλώλεκα (tr.) ὀλώλα (intr.)	—	—
εἰμί	—	—	—	—	—	ἔσομαι	—	—	—	—

Deponents:

δύναμαι — — — ἡδυνήθην — δυνήσομαι — — — δεδύνημαι.
κεῖμαι, κάθημαι, ἐπίσταμαι have futures only: κείσομαι, καθήσομαι, ἐπιστήσομαι.

II.3.14. *Peculiarities.* The remaining irregularities are incidental exceptions to the productive procedures. As they do not affect the formation of the personal, infinitive and participial endings we have not set up special classes for them, but will list them according to the class of conjugation which they follow. A number of them are however not restricted to one type and will be discussed first as general peculiarities.

General. A number of verbs of which the stem has a final vowel or diphthong, have in the passive aorist and perfectives an -σ- resp. before -θην etc., and before the endings -μαι (-μην), -ται (-το),

¹ The ptc. is ἔστηκώς at Apc. V 6, XIV 1 (cursives), XVIII 10, or ἔστώς at VII 1, 9, X 5, 8, XI 4, XIV 1 (uncials), XV 2, XIX 17, XX 12.

-μεθα, (no 3rd p.pl.), -μένος *etc.*; this -σ- cannot be seen as replacement of a ζ [z] or dental explosive as found in the pres. ind. Schwyzler lists 45 of such aorists and 20 of such perfectives of all types and from Classical and Koine Greek together, such as κελεύω—ἐκελεύσθην—κεκέλευσμαι, χρίω—ἐχρίσθην, σπῶ, -ᾶς—ἔσπασμαι—ἐσπάσθην, *etc.* However, -σθην *etc.* and -σμαι *etc.* are never found to our knowledge after the bases ending in -η of types 2. νικῶ and 3. φιλῶ, or in type 4. δουλῶ, or in the verbs in -εύω of type 1. that are transpositions. Hence: ἐπαιδεύθην (transposition of παῖς, παιδός), but ἐκελεύσθην (no transposition). Elsewhere the forms with -σ- may occur by the side of forms without -σ- *e.g.* Canticum V 12 λελουμαι (A, **κ**)—λέλουσμαι (B), or have often supplanted the latter *e.g.* χρίω—κέχρισμαι, later κέχρισμαι.

Type 1. παιδεύω. καίω and κλαίω: stems καυ-, κλαυ- in remaining tenses; ἐμπαίζω: velar basis in remaining tenses ἐνέπαιζα *etc.* (and so 5 verbs in the N.T.); στηρίζω wavers: Apc. III 2 στήρισον (A, C)-στήριζον (**κ**, 046); ἀρπάζω: Apc. XII 5 ἡρπάσθη (A, C), -χθη (046), -γη (**κ**).

Subtype μαινώ. Without modification in the pres. ind.

δέρω	—	ἔδειρα	—	ἔδάρην	—	δερῶ	—	δέδαρκα	—	δέδαρμαι
μένω	—	ἔμεινα	—	—	—	μενῶ	—	μεμένηκα	—	—
νέμω	—	ἔνειμα	—	ἐνεμήθην	—	νεμῶ	—	ενέμηκα	—	ενέμημαι ¹

ἀκοκτέ(ν)ω (Matt. X 28, Apc. VI 11: A, C, **κ**) by the side of ἀποκτείνω (2 Cor. III 6: B).

With modification to -η- in the aor.act. and pf. act.:

φαίνω	—	ἔφην	οἱ ἔφανα	—	ἐφάνην	—	φανῶ	—	πέφαγκα, (trans.)	—	πέφαμμαι
									πέφην	(intr.)	
μαίνω	—	ἔμην		—	ἐμάνην	—	μανῶ	—	μέμηνα	—	—

With modification to -ο- in the pf. act.: ἀποκτείνω—ἀπέκτονα or ἀπέκτα(γ)κα, διαφθείρω—διέφθορα (intr.) and διέφθορκα (trans.).

Without nasal in the aor. pass. and the pf. act.: φθάνω—ἔφθακα, κλίνω—ἐκλίθην—κέκλικα, and so κρίνω, πλύνω, χύν(ν)ω; τ(ε)ίνω ("pay")—ἔτειθην—τέτεικα (aor. ἔτεισα, fut. τείσω), but: τείνω ("stretch")—ἐτάθην—τέτακα (aor. ἔτεινα, fut. τενῶ); ἐλαύνω—ἤλασα—ἤλασθην—ἐλάσω—ἐλήλακα—ἐλήλασμαι.

With stem ending in -η- in remaining tenses (*cf.* above μένω and νέμω): βούλομαι—ἐβουλήθην—βουλήσομαι—βεβούλημαι, and so θέλω, μέλει, μέλλω (no pf. ind.), οἶζομαι (no pf. ind.), ὀφείλω (no pf. ind.)

¹ By the side of the fut. νεμῶ also νεμήσω (*e.g.* Hosea IV 16). Of γέμω (Apc. IV 6) no fut. ind. or aor. is known.

οἰκτίρω, χαίρω (ἐχάρην, χαρήσομαι), αὐξάνω (αὐξη-), κερδαίνω (κερδη-).
Subtypes καλύπτω *and* πράσσω.

Without aspiration in pf. act.: φρίσσω—πέφρικα, πλήσσω—πέπληγα (also πέπληγα), πράσσω—πέπραγα (intr.), πέπραχα (trans.), τήκω—τέτηκα, σήπω—σέσηπα.

With -o-vowel in the pf. act. and -α- in the middle perfect: στρέφω—ἔστροφα, ἔστραμμαι; τρέφω—τέτροφα, τέθραμμαι; τρέπω—τέτροφα, τέτραμμαι; πέμπω—πέπομφα, but πέπεμμαι; κλέπτω—κεκλοφα, but κέκλεμμαι; cf. dental stem πείθω—πέποιθα [-ojtha or —ütha].¹

With different stem(s) in remaining tenses:

πλάσσω—ἐπλασα, ἐπλάσθην, etc.; ἔλκω—ἐλκυσσα, εἰλκύσθην, etc.; μάχομαι—ἐμαχεσάμην, ἐμαχέσθην, μαχέσομαι, μεμάχημαι.

Verbs in -σκω belong only seemingly to the velar stems:

ἄρέσκω—ἤρεσα—ἄρέσω, γηράσκω—ἐγήρασα—γηράσω, etc.; pres. reduplication is lost in further tenses: μιμνήσκω—ἐμνήσθην, etc.; τιτρώσκω—ἔτρωσα, ἐτρώθην, etc.; note: ἀναλίσκω—ἀνήλωσα—ἀναλώσω.²

All subtypes. Passive aorists and futures without -θ-, which we have also seen in type 8. τίθημι, may occur in all the subtypes of παιδεύω. Ruipérez has collected 87 instances (Classical and Koine Greek) of this formation³ e.g. παύω—ἐπάην, ἀναπαήσομαι (Apc. XIV 13), καίω—κατεκάην (Apc. VIII 7, but in XVIII 8 κατακαυθήσεται), κόπτω—ἐκόπην, ἀρπάζω—ἤρπάγην, θάπτω—ἐτάφην, etc.; of mono-syllabic stems the vowels -ε- and -η- are modified to -α-: τήκω—ἐτάκην, σήπω—ἐσάπην, κλέπτω—ἐκλάπην, στρέφω—ἐστράφην, τρέπω—ἐτράπην, τρέφω—ἐτράφην, ἐκπλήσσω—ἐξεπλάγην, but the simplex ἐπλήγην (Apc. VIII 12). No rule can be given for their occurrence, not even in the liquid stems, where forms in -θην may also occur e.g. ἀποκτέννω—ἀπεκτάνθην (Apc. XI 5) and ἀπεκτάνην (Galenus 14, 284). In the Hellenistic period their number was increasing, innovations being e.g. ἀγγέλλω—in compounds: -ηγγέλην,⁴ ἀρπάζω—

¹ Some of these active perfects have alternative forms with -α-: so in Polybius: (κατ-)έστροφα, τέτροφα, τέτραφα; note also κέκλεβα at Andania (I B.C.).

² The only velar basis is διδάσκω, ἐδίδαξα, ἐδιδάχθην, etc. The original present reduplication has been extended to the other tenses. The verb may have arisen from *di-dák-skō cf. Latin *disco* from *dī-dk-skō, perf. *didici*.

³ o.c., pp. 142-144.

⁴ The polysyllabic bases, however, have always -θην, one of the rare exceptions being ἡγγέλην by the side of ἡγγέλθην.

ἡρπάγην, older ἡρπάχθην. Often several formations have replaced one another *e.g.* κλέπτω-ἐκλέφθην, ἐκλάπην, ἐκλέπην (the latter in B.G.U. 454, 19: II A.D.), or occur by each other's side: Apc. XI 19 ἡνοίχθη (046), ἡνοίγη (A, C, Ⲙ).

Type 2. νικῶ/ἀνιῶ. A number of verbs (5 in the N.T.) have in the non-durative tenses -α- contrary to the rules (see *par.* 11.3.11) *e.g.* γελῶ-ἐγέλασα, *etc.*, and may have -σ- in pass. aor. and pf. med.: σπῶ, ἐσπάσθην. The verb διψῶ wavers, especially so when used together with πεινῶ, ἐπείνασα, *etc.*, which is also one of the exceptions. Compare Apc. VII 16 A: οὐ πινάσουσιν ἔτι οὐδὲ μὴ διψήσουσιν ἔτι, with Ⲙ: οὐ πεινάσουσιν οὐδὲ διψάσουσιν ἔτι.

Type 3. φιλῶ. A number of verbs (5 in the N.T.) have in the non-durative tenses -ε- instead of -η-, and may have -σ- in the pass. aor. and pf. med. *e.g.* τελῶ, ἐτέλεσα, ἐτελέσθην, ἐμῶ-ἤμεσα (Apc. III 16) *etc.* Mixed: αἱρῶ, αἱρήσω, *etc.* but ἡρέθην; ἐπαινῶ, ἐπήνεσα, *etc.* but ἐπήνημαι; δέω "tie", ἔδησα, *etc.* but ἐδέθην, δέδεκα, -μαι (δέω "lack, need" ἑδέγησα, *etc.*); καλῶ, ἐκάλεσα, *etc.* but ἐκλήθην, κέκληκα, -μαι,¹ πλέω, πνέω, νέω: ἔπλευσα, *etc.*; χέω-ἔχεα-χεῶ; ῥεῖ-ἐρρύη-ἐρρύηκεν; δοκῶ-ἔδοξα, *etc.*, ἀπωθῶ-ἀπῶσα, *etc.*; γαμῶ-ἐγάμησα, but ἔγημα (Luke XIV 20).

11.4. *Productivity:* See *par.* 11.3.1.

11.5. *Morphological Valence of the Verb.*

The morphological valence of the verb comprises numerous transpositional categories, for instance:

(1) Transpositions to the substantive system:

παιδεύω—παιδευτής, σαλπίζω—σαλπιστής : actor value

παιδεύω—παίδευσις, πράσσω—πρᾶξις : action or result of action

παιδεύω—παίδευμα, πράσσω—πρᾶγμα : idem

(2) Transpositions to the adjective system (besides the participles):

παιδεύω—παιδευτός, πράσσω—πρακτός : value of possibility or perfective value

παιδεύω—παιδευτικός, πράσσω—πρακτικός: concerned with the action

For information on all these categories in Koine Greek the reader is referred to the grammars of Mayser, Moulton-Howard and

¹ A very curious blend is κεκαλουμένος (accent?) instead of κεκλημένος on a coin of the Parthian king Gotarzes, *cf.* S. Icard, *Dictionary of Greek Coin Inscriptions*, Chicago 1968, s.v. ΓΩΤΕΡΖΗΣ.

Palmer, especially to the last, who has described the differences in value, if any, between such categories as *παίδευσις*—*παίδευμα*.¹

N.B. The transpositions in *-τέος* which had a gerundival value, were used only by Atticistic authors. The only instances from the N.T. are: Luke V 38 *οἶνον νέον εἰς ἀσκούς καινοὺς βλητέον* and its parallel Mark II 22 (C, Θ).

There are two categories which can be considered as the counterparts of the adverbial categories of the adjective system, perhaps even as transpositions to it. We shall discuss them here as they are not described by Palmer.

- a) *-δην*: *κρύπτω*—*κρύβδην* “secretly”
κλέπτω—*κλέβδην* “by stealth”
πλέκω—*πλέγδην* “entwined” *etc.*

These words which occur only in literary Koine Greek constitute an unproductive category. As our instances show, the different labial and velar explosives are represented before *-δην* by *β* and *γ* respectively.

- b) *-τί*: *Ἀττικίζω*—*Ἀττικιστί* “in Attic”

The velar and labial explosives and the dental consonants are represented before *-τί* respectively by *κ*, *π* and *σ*. Within this category two kinds can be distinguished:

- α) Words correlated with verbs in *-ίζω* or *-άζω* (of which many are transpositions of geographical and ethnical names) *e.g.*
Ἑβραΐζω, *Ἑλληνίζω*, *Ῥωμαΐζω* - *Ἑβραϊστί* “in Hebrew”, *Ἑλληνιστί* “in Greek”, and *Ῥωμαϊστί* “in Latin” (all in John XIX 20)
ὀνομάζω—*ὀνομαστί* “by name”, *etc.*

If the corresponding verbs are not attested these words may be transpositions of geographical, ethnical and personal names *e.g.*

¹ E. Mayser, *Grammatik der griechischen Papyri aus der Ptolemäerzeit*, vol. I-3 *Stammbildung*, Berlin, 1935. J. H. Moulton-W. F. Howard, *A Grammar of New Testament Greek*, Edinburgh, 1957, vol. II, pp. 334-410. L. R. Palmer, *A Grammar of the Post-Ptolemaic Papyri*, London, 1948. Cf. E. Benveniste, *Noms d'agent et noms d'action en indo-européen*, Paris, 1948, who describes *a.o.* the subtle differences in value between the Homeric transpositions in *-τωρ* and *-τήρ* (p. 45 ss.), and M. Lejeune, who does so for the corresponding *fem.* *-τειρα*, *-τρια*, *-τρίς* in *Les noms d'agent féminins en grec*, *Revue de Philologie* 24, 1950, p. 9 ss.

Ἀζωτος—Ἀζωτιστί "in the dialect of Ashdod" (2 Esdr. XXIII 24)
 Λυκάονες—Λυκαονιστί "in Lycaonian" (Acts XIV 11)
 Ζεὺς (Διός)—Διασί „in the language of Zeus" (Dio Chrys. XI 23),
etc.

β) Compositions of which the first element is often the negative ἀ-, and which may be considered as the adverbs belonging to the verbal adjectives in ἀ- . . . -τός:

κινῶ—ἀκίνητί "immovably"
 μελεῖ—ἀμελητί "heedlessly"
 μεταστρέφω—ἀμεταστρεπτί "without turning around", *etc.*

Non-compositions are νεωστί, ταχεωστί, μεγαλωστί, ἱερωστί; they have the same value as the adjectival adverbs νέως, ταχέως, *etc.*

11.6. *Periphrastic Constructions*

In the preceding sections we have mentioned a few times the existence of the so-called periphrastic constructions. By this term we indicate word groups consisting of a finite verb and a participle or infinitive, which are built into the verb system in such a way that they replace word categories no longer used, compete with those that are falling into disuse, or occupy a place which by comparison with other subsystems can be considered as an open place in the verbal *word* system. According to the components one can distinguish between:

a) finite verb plus participle: εἰμὶ παιδεύων, and b) finite verb plus infinitive: μέλλω παιδεύειν, but this formal dichotomy does not furnish us with a relevant subdivision. In our opinion it is a better procedure to describe which of these constructions have replaced former word categories and which of them occupy an open place in the verbal word system.¹

11.6.1. *Periphrastic Constructions that have completely replaced former Word Categories.* Under this heading come only two constructions, namely the 3rd persons plural of the middle perfect and pluperfect indicatives of verbs which have a velar, labial or

¹ The differences with *a.o.* εἰμὶ "I dwell" and participium conjunctum are discussed by L. Hartman, *Participial Constructions in the Synoptic Gospels*, Lund-Copenhagen, 1963 (Coniectanea Neot. XIX). According to O. Szemerényi, *Greek μέλλω*, *Am. Journ. Phil.* 72, 1951, pp. 362-363, μέλλω originally meant 'go' cf. ξμολον, μέμβλωκα.

dental basis, like τάσσω, ἄγω, κρύπτω, κτίζω, *e.g.* Rom. XIII 1 τεταγμένοι εἰσὶν and Acts IV 31 ἦσαν συνηγμένοι. The older word categories τετάχαι, ἐτετάχατο disappeared from Attic inscriptions c. 400 B.C.

11.6.2. *Periphrastic Constructions competing with Word Categories that are growing obsolete.*

a) All the futural categories with the exception of the active non-perfective indicatives παιδεύσω, νικήσω, *etc.*

The non-perfective future infinitives and participles (*cf. par.* 11.2.3.3.6) may be replaced in the first century by resp. μέλλειν plus aoristic infinitive and μέλλων plus aoristic infinitive *e.g.* Rom. VIII 18 μέλλουσιν . . . ἀποκαλυφθῆναι. It may be remarked that an optative μέλλοιμι plus infinitive is not attested. The future perfect is replaced by ἔσομαι plus active or middle perfective participle *e.g.* Luke XII 52 ἔσονται . . . διαμεμερισμένοι. Periphrastic constructions with the value of a future perfect participle or infinitive do not occur; ἐσόμενος and ἔσεσθαι are now obsolete and would have to be represented by periphrastic groups themselves. We do not know of any instances of combinations like *μέλλων εἶναι πεπαιδευμένος.

b) The obsolete perfect imperative, which occurred only in the middle voice, is replaced by ἴσθι plus the middle perfect participle *e.g.* Luke XII 35 ἔστωσαν . . . περιεζωσμένοι.¹

11.6.3. A number of periphrastic constructions occur by the side of word categories that were certainly not growing obsolete in first century Koine Greek. In the strict sense they do therefore not deserve to be named as such, but because of their formal likeness with the above instances the traditional grammars list them under the same heading. The most important of these is the combination of the past indicative of the verb εἰμὶ and a durative participle, which occurs 68 times in the N.T., for instance Matt. VII 29 ἦν γὰρ διδάσκων, by the side of Matt. V 2 ἐδίδασκεν.

Less frequent are the combinations of subjunctive ᾤ, *etc.* plus durative participle: James II 15 (A, P) λειπόμενοι ᾧσιν (only N.T.

¹ The obsolete optative categories cannot be said to have been replaced by δύναιμι plus infinitive, because this group has the meaning "I can . . ., am able to . . ."; the optative on the other hand has the value "I may . . ., it is possible that I . . ." (Dutch "ik kan" is ambivalent: "I am able to" and "I may, it is possible that I . . ."). As to the aspect of wishing only the 1st p.sg. can be circumscribed by εὔχομαι plus infinitive alone, but the other verbal persons should be rendered by εὔχομαι plus accusative and infinitive.

instance), which perhaps¹ aims at avoiding the homophony of λείπωνται and λείπονται, both [lípontɛ], and the imperative ἴσθι and a durative participle, of which there are only two instances in the N.T. e.g. Luke XIX 17 ἴσθι ἐξουσίαν ἔχων.

Aerts has shown that ἡμην (or ἐγνώμην) plus durative participle was especially frequent in the LXX, the N.T., and the related Apocrypha.² This periphrasis obviously did not arise from the need to express a value that was correlated with an obsolete category, because e.g. ἦν διδάσκων and ἐδίδασκεν occur by each other's side. Both have a durative value and a value of past time; both moreover, could serve as renditions of the Hebrew-Aramaic periphrastic constructions of הָיָה (Ar. هَيَّ) with the participle, which were in these languages the only means—by the 1st century A.D.—to express the durative value and the past time value combined, the former by the participle, the latter by the qāṭal of הָיָה, which was indifferent as to the speaker's view of the action. The fact that both Semitic languages had such a durative periphrasis has in our opinion influenced the frequent use of ἡμην etc. plus participle in the Synoptic Gospels. It may have been one of the means for an author to retain some of the *couleur locale* of Jewish Palestine.

It is not so surprising as some seem to think that the value of this construction is not always *cursive* (or *progressive*): neither is the value of the non-periphrastic durative. A distinction between a more verblike and a more adjectival use of these constructions should not be based on this fact.³ It is much more relevant to observe that whenever a periphrasis is in the specific context *non-cursive*, (cf. Aerts: "situation fixing" i.e. static and intransitive)⁴ it is not necessarily customary, iterative or general either, as we might expect on the ground of the value of the imperfect indicative: it may also have some kind of non-emphatic value, implying that a word or word group other than the periphrasis itself is stressed in the sentence. However, the general and customary-iterative aspects *can* be present, for instance in Gen. IV 2 Καὶν δὲ ἦν ἐργαζόμενος τὴν γῆν "Cain was a tiller of the ground", and perhaps in Matt. VII 29 ἦν γὰρ

¹ That is if the reading is original: **Ν**, B, C omit ὧσιν: the participle is then to be connected with ὑπάρχουσιν.

² W. J. Aerts, *Periphrastica*, Amsterdam, 1965, p. 56 ss.

³ As is done by G. Björck, HN ΔΙΔΑΚΚΩΝ, *Die periphrastischen Konstruktionen im Griechischen* (Skrifter utg. av K. Hum. Vet.-Samf. Uppsala 32, 2) 1940.

⁴ Aerts, *o.c.*, pp. 14 and 64.

διδάσκων αὐτοὺς ὡς ἐξουσίαν ἔχων, καὶ οὐχ ὡς οἱ γραμματεῖς αὐτῶν “for whenever he taught them he did so with authority, not like their scribes did” (but see below). This insight, that not the periphrasis itself is emphatic, but some other element in the sentence, we owe to Rosén,¹ and Gonda has observed that even this is not always the case: the periphrasis may also have a parenthetical character, the rest of the sentence offering new information without being emphatic.² Very often, however, as Rosén has shown with regard to its use in Herodotus, the periphrasis occurs in sentences which inform us on the circumstances under which a previously mentioned action has taken place: this action is as it were recapitulated by the periphrasis. A good example from the N.T. is Mark X 21 ... ὅσα ἔχεις πώλησον ... 22. ἀπῆλθεν λυπούμενος, ἦν γὰρ ἔχων κτήματα πολλά “for he had *many* possessions”, and also Matt. VII 29 quoted above: ἦν διδάσκων *cf. v. 28* τῇ διδασκῇ αὐτοῦ. The applicability of Rosén’s theory to N.T. Greek needs, of course, a more thorough check, but, periphrastic constructions being almost wholly absent in the Apc., this is beyond our present scope.

According to Aerts one should rule out the possibility of any influence from Aramaic on the use of periphrastic constructions in the Gospel of St. Luke and in Acts, because these constructions are hardly found in the four Gospels within the Logia of Jesus, but are at the same time more frequent in St. Luke’s works than elsewhere in the N.T. As this author was thoroughly acquainted with the LXX version and—according to Aerts—not of Jewish descent he can only have taken over these constructions from the Greek Old Testament.³

We do not think that these arguments are quite sound: that the Logia of Jesus are devoid of the construction can also mean that the original Greek of that source had been kept free of this Semitic turn; the absence as such does not prove anything about the origin of the construction. Moreover, it is a well known fact that it existed in Palestinian Aramaic.⁴ If St. Luke were not a Semite Hebraistic influence via the LXX-version would be more probable than direct

¹ H. B. Rosén, *Die ‘zweiten’ Tempora des Griechischen. Zum Prädikatsausdruck beim griechischen Verbum*, Mus. Helv. 14, 1957, p. 133 ss.

² J. Gonda, *A Remark on ‘Periphrastic’ Constructions in Greek*, Mnemosyne 12, 1959, p. 97 ss.

³ *o.c.*, pp. 58, 62. Björck discards any Semitic influence: *o.c.*, pp. 59-62.

⁴ Stevenson, *o.c.*, p. 57. H. Odeberg, *The Aramaic Portions of Bereshit Rabba with Grammar of Galilaean Aramaic*, Lund-Leipsic 1939, II, pp. 10, 98.

influence from Aramaic, but that would hold only for the Gospel of St. Luke and Acts: the occurrences of $\tilde{\eta}\nu$ plus participle in the Gospels of St. Matthew and St. Mark would still have to be accounted for. The non-Jewish ancestry of St. Luke is, however, by no means certain; he may even have been the same person as the Λούκιος, to whom St. Paul refers as a relative of his (Rom. XVI 21): Λουκᾶς would be then the short name by the side of the more official Λούκιος.¹

We hold to the opinion that the Semitic origin of this periphrastic construction in the Gospels cannot be doubted, but that it is one of those cases which it is difficult to attribute either to Hebrew or to Aramaic influence without the support of further data. It is a remarkable fact that it is almost wholly absent from the thoroughly Jewish Apocalypse of St. John (see *par.* 12.6.3.3.1.).

The periphrastic word groups consisting of the indicative εἰμί (or $\tilde{\eta}\nu$) and the perfective participle (act. or m-p.) occur in the N.T. likewise by the side of the word categories of the perfect and pluperfect indicatives, e.g. John XX 30 ἔστιν γεγραμμένα by the side of γέγραπται (next verse), and Luke V 17 ἦσαν ἐληλυθότες by the side of Acts VIII 27 and IX 21 ἐληλύθει. Only the medio-passive periphrasis has a Semitic counterpart in hāyāh qāṭul, but no marked frequency compels us to adduce Hebrew or Aramaic. All the instances mentioned by Blass-Debrunner² may be explained as having the same unemphatic or parenthetic value as the durative periphrasis discussed above. In John XX 31 for instance, it is clearly γέγραπται which is more emphatic than the periphrasis in v. 30: "but these *have* been written down in order to ss.", and so probably Hermas, *Sim.* IX 4, 1 ὑποδεδύκεισαν vs. ὑποδεδουκυῖαι ἦσαν; in Apc. XVII 4 $\tilde{\eta}\nu$ περιβεβλημένη may imply stress on πορφυροῦν καὶ κόκκινον, or may replace the obsolete pluperfect indicative.

11.6.4. The last kind of periphrastic constructions which we have to treat of, are those that have no *exact* equivalents in the word system of the verb:

a) Durative Present Indicative: εἰμί plus durative participle e.g. James III 15 οὐκ ἔστιν αὕτη ἡ σοφία ἠνωθεν κατερχομένη (9 more N.T.

¹ Cf. above *par.* 8.3.2. — If St. Luke was an inhabitant of Antioch influence from Syriac (which is likewise Aramaic) can also be taken into account. Cf. M. Black, *An Aramaic Approach to the Gospels and Acts*, Oxford, 1967, 3rd edition, p. 17.

² o.c., *par.* 352.

instances). This construction has positively the values “timeless” and “durative”. It is marked in opposition to the present indicative word category, which is also “timeless” in value, but neutral with regard to the opposition between the durative and aoristic views on the action.

b) Durative Future Indicative: three varieties occur in the N.T., namely:

ἔσομαι plus durative participle *e.g.* Matt. X 22 ἔσεσθε μισούμενοι (10x)

μέλλω plus durative infinitive *e.g.* Matt. XVII 12 μέλλει πάσχειν (23x)

μελλήσω plus durative infinitive *e.g.* Matt. XXIV 6 μελλήσετε δὲ ἀκούειν (2x)

These word groups have a futural as well as a durative value, and are marked as opposed to the future indicative word category, which is neutral as to durativity just as the only N.T. instance of μέλλω plus aorist infinitive found in Apc. III 16 μέλλω σε ἐμέσαι.

The obsolete future participle ἐσόμενος and infinitive ἔσεσθαι were not used as components of periphrastic constructions. Instead the participle and infinitive of μέλλω were used in combination with an infinitive (see II.6.4.5.-6).

c) Past Future Indicative: ἔμελλον plus durative infinitive (17x) or aorist infinitive (2x) *e.g.* Luke VII 2 ἑκατοντάρχου δέ τινος δοῦλος κακῶς ἔχων ἤμελλεν τελευτᾶν “would die, was going to die, was at the point of death”. These word groups express futurity or intention reckoned from a moment in the past. It is marked in opposition to the future indicative word category, which as we have seen, is futural-intentional either reckoned from the past or from the present time.

d) Future Subjunctive: μέλλω, μέλλης *etc.* plus (durative) infinitive (3x) *e.g.* Luke XXI 7 ὅταν μέλλῃ ταῦτα γίνεσθαι. An optative μέλλοιμι plus infinitive does not occur, as the optative is falling into disuse.

e) Durative Future Participle: μέλλων plus durative infinitive (29x) *e.g.* Mark X 32 τὰ μέλλοντα αὐτῷ συμβαίνειν. This group is marked as opposed to the combination of μέλλων and an aorist infinitive, which occurs only three times in the N.T.¹

¹ It was also marked as opposed to the futural participle, but in the N.T. this participle is rare and textually uncertain (Blass-D., *o.c.*, *par.* 351). The combinations of μέλλω, ἔμελλον *etc.* and aorist infinitive are severely criticized by the Atticists: Phrynichus 336 ἔμελλον γράψαι· ἐσχάτως βάρβαρος ἢ σύνταξις

f) Durative Future Infinitive: μέλλειν plus durative infinitive, one instance in Acts XXVIII 6 μέλλειν πίμπρασθαι. Only in the Book of Acts occurs the probably Atticistic group of μέλλειν plus *future* infinitive ἔσεσθαι: XI 28, XXIII 30, XXIV 15, XXVII 10.

g) Perfect Subjunctive: act.: ᾤ, ᾔς *etc.* plus act. perfect participle, and m.-p.: ᾤ, ᾔς *etc.* plus m.-p. participle *e.g.* James V 15 ἡ πεποιηκώς, and Luke XIV 8 ἡ κεκλημένος. Perfect optatives like εἶην πεποιηκώς do not occur in the N.T., as the optative mood was obsolete, but *cf.* from the Ptolemaic period: U.P.Z. 6, 39 εἶησαν εἰσπεπορευμένοι (163 B.C.).

11.6.5. *Final Survey.* We shall now combine the different periphrastic word groups which we have discussed into one diagram together with the verbal word categories. As only ἴσθι and ἔσομαι plus pf. ptc. would have to be added to the perfective subsystem given in the preliminary survey (*par.* 11.2.3.1), we shall not repeat it here, but display only the non-perfective subsystems.

		non-past ind.	past ind.	subjunct.	imperat.	infin.	ptc.
non-fut.	durative	λούων εἶ	ἔλουες λούων ᾔς	λούης	λοῦε	λούειν	λούων
	aoristic	λούεις	ἔλουσας	λούσης	λοῦσαι	λούσαι	λούσας
futural	durative	λούων ἔσει μέλλεις λούειν	ἔμελλες λούειν	μέλλης λούειν		μέλλειν λούειν	μέλλων λούειν
	aoristic	λούσεις	ἔμελλες λούσαι	?			μέλλων λούσαι

In this diagram we have classified the present indicative as *aoristic* because of its neutral position in the opposition durative *vs.* aoristic.

αὐτῇ; Thomas Magister 228, 10 prescribes the use of ἄν with these constructions: οὐ μέλλω ποιῆσαι, ἀλλὰ μετὰ τοῦ ἄν, ἔγουν μέλλω ποιῆσαι ἄν.

CHAPTER TWELVE

THE USE OF THE VERB IN THE APOCALYPSE

12.1. *Introduction.*

The verb system of Koine Greek as sketched above is not used in its complete extent by the author of the Apocalypse. The absence of a number of categories in this book can be understood from trends present in the 1st century A.D.: the optatives, the future infinitive and future participle, the perfect imperative and the future perfect are absent from the remaining N.T. writings as well or they are obsolete, as has been pointed out above. The periphrastic constructions are rare with the exception of μέλλω, ἐμελλον, μέλλων plus infinitive of which some instances are found.

The remaining categories, which can be said to be frequently used in the N.T. are nevertheless not always present in the Apocalypse. If we should count the number of times that each verb category occurs, it will strike us that St. John had a definite predilection for some of them, but that others are hardly found or not at all. We shall first list the figures of the different categories as we have counted them from the Codex Alexandrinus; after that comes the discussion of the use of the various categories in connection with possibly underlying Semitic verb categories or periphrastics. Again we must make the remark that due to the complexity of the verb system some of the facts will have to be mentioned twice, at different points of the discussion.

12.2. *Statistics*

	<i>Imperfect</i>	<i>Dur. Subj.</i>	<i>Dur. Imper.</i>	<i>Dur. Inf.</i>	<i>Dur. Ptc.</i>
	act. 14	act. 11	act. 10	act. 9	act. 195
	med. —	med. —	med. 2	med. 1	med. 11
<i>Pres. Ind.</i>	a.t. —	a.t. 4	a.t. 3	a.t. 7	a.t. 44
act. 97	dep. 5	dep. 2	dep. 12	dep. 2	dep. 45
med. 5	19	17	27	19	295
a.t. 120					
dep. 27	<i>Aor. Ind.</i>	<i>Aor. Subj.</i>	<i>Aor. Imper.</i>	<i>Aor. Inf.</i>	<i>Aor. Ptc.</i>
249	act. 229	act. 35	act. 45	act. 56	act. 7
	med. —	med. 2	med. —	med. —	med. —
	pas. 83	pas. 19	pas. 2	pas. 5	pas. —
	a.t. 85	a.t. 12	a.t. 11	a.t. 9	a.t. 4
	dep. 32	dep. 1	dep. 1	dep. 2	dep. —
	429	68	59	72	11

Fut. Ind.

act.	64
med.	5
pas.	9
a.t.	16
dep.	24
	118

Perf. Ind.

act.	11
med.	3
a.t.	8
dep.	—
	22

Pluperf.

act.	—
med.	—
a.t.	1
dep.	—
	1

*Perf. Ptc.*¹

act.	—
med.	67
a.t.	12
dep.	—
	79

12.3. *Discussion of the Statistics*

12.3.1. *Voice*. It was not always easy to decide which verbs are really activa tantum and deponents: we have included some doubtful cases such as προσκυνεῖν (a.t.) and φοβεῖσθαι (dep.). A characteristic of St. John's use of language already noticed by Allo is the poverty in medial verbs.² If we exclude for the moment the perfect participles (see *par.* 12.3.1.4) there are together only 29 media, whereas the passive verbs amount to 118, but it has been stated above that Koine Greek tended to unify middle and passive by giving up the opposition in the categories where it was present, *i.e.* in the aorists and futures. The Apc. betrays this tendency, too:

middle: aor. ind. —, aor. subj. 2, aor. imp. —, aor. inf. —, fut. ind. 5
 passive: aor. ind. 83, aor. subj. 19, aor. imp. 2, aor. inf. 5, fut. ind. 9,

that is 7:118, but the figure of the media may be still too high, since three of them belong to περιβάλλω "to clothe", which does not seem to have had a passive περιβλήθην or περιβληθήσομαι with the same sense.

In the remaining categories "middle" and "passive" are in complementary distribution and we feel free to oppose them indis-

¹ Abbreviation: "a.t.": activa tantum. The imperfects do not include the 19 past tenses of εἰμί, κεῖμαι, μέλλω, because they are not opposed to aorists, and are neutral past tenses (N.B. ἐμέλλησα is absent in LXX, N.T., Apost. Fathers). The 11 occurrences of οἶδα, which we do not consider a perfect tense, we have counted as pres. ind. To the ptc. pf. middle we have added περιβεβλημένη (XII 1, where A has evidently a lapsus).

² J. Allo, *L'Apocalypse de St. Jean*, Paris 1921, p. CXL.

criminally to the active verbs. It appears then that in all the categories of the verb the combined middle-passive voice is in the minority as opposed to the active, with the significant exception of the participles of the middle perfect, especially so because 11 of the a.t. pf. participles are instances of ἐστώς or ἐστηκώς, of which the perfective value is doubtful. The figures representing the pure opposition active: middle-passive *i.e.* without activa tantum and deponents, are as follows:

	<i>Pres.Ind.</i>	<i>Imperf.</i>	<i>Aor.Ind.</i>	<i>Fut.Ind.</i>	<i>Perf.Ind.</i>	<i>Dur.Subj.</i>	<i>Aor.Subj.</i>
a.	97	14	229	64	11	11	35
m-p.	5	—	83	14	3	—	21

	<i>Dur.Imp.</i>	<i>Aor.Imp.</i>	<i>Dur.Inf.</i>	<i>Aor.Inf.</i>	<i>Dur.Ptc.</i>	<i>Aor.Ptc.</i>	<i>Perf.Ptc.</i>
a.	10	45	9	56	195	7	—
m-p.	2	2	1.	5	11	—	67

12.3.I.I. *Bilingualism.* How are we to account for this divergence of the pf. participles? In our opinion it can easily be explained if we assume that in the Apocalypse of which the Jewish background is evident, the Greek language has been in contact with Hebrew and/or Aramaic.¹ This contact may have arisen in two ways:

a) St. John as a multilingual person was himself acquainted with Hebrew, Aramaic and Greek, and his use of the latter was influenced by his mother tongue.

b) St. John had no mastery of Greek, and composed the Apc. either in Hebrew or in Aramaic. The book was afterwards translated into Greek by another person, who must at least have been bilingual (knowledge of Hebrew and Greek, or of Aramaic and Greek), but as it is unlikely that this translator knew either of the Semitic languages unless he was a Christian of Jewish origin, he almost certainly knew both these languages.² The difference be-

¹ For the problem of bilingualism in general we refer to U. Weinreich, *Languages in Contact*, Publications of the Linguistic Circle of New York, Nr. 1, New York 1953. His definition of contact is as follows (p. 1): "In the present study two or more languages will be said to be IN CONTACT if they are used alternately by the same persons. The language-using individuals are thus the locus of the contact."

² That he knew Hebrew might appear from Apc. IX 11 where he translates a Hebrew name expressis verbis into Greek (cf. XVI 16). On the knowledge of Hebrew and Aramaic in 1st cent. Palestine see: M. Black, *An Aramaic Approach to the Gospels and Acts*, Oxford, 1967, 3rd ed., pp. 15 ss., 47-49; J. N. Sevenster, *Do you know Greek? How much Greek could the first Jewish Christians have known?* Leyden, 1968, pp. 34, 37, 176. It need not wonder

tween *a*) and *b*) is in our opinion mainly a difference in the person who brought the languages into contact, a difference which cannot be discerned in Greek: whether the knowledge of Greek of St. John or his translator was insufficient, the result was in the end the same. In our opinion it is even conceivable that original Greek works were composed in some kind of Biblical Greek which imitated Semitizing translations, but in that case actual blunders against Greek as we find them in the Apc. will have been avoided.¹

12.3.1.2. *Contemporary Hebrew*. The second question to be answered is by which of the known varieties of Hebrew or Aramaic we assume that St. John's (or his translator's) use of Greek was influenced. It is evident that, whenever possible, we have to adduce for comparison the language of contemporary documents, but the only ones that are really from the same period as the New Testament are the few Hebrew and Aramaic letters, contracts, *etc.*, found in the caves of Murabba'āt and Naḥal Ḥever, which date from 55-134 A.D. These documents are, however, too short and fragmentary to serve as a basis for comparison, but they definitely prove that Hebrew and Aramaic were used by each other's side in 1st century Palestine.

A second collection which is roughly contemporaneous with the N.T. writings are the Qumran scrolls which can be dated from the 1st cent. B.C. up to 68 A.D. Although they contain a sufficient quantity of linguistic material, neither these may be used for comparison, because the character of the Hebrew is classicistic, imitating the Biblical use of that language, though slightly modified by modernisms which crept in during the manuscript tradition. If the Qumran community, as is often supposed, is identical to the Essene

that there has been interaction between Hebrew and Aramaic up to the present day, which makes it more difficult to decide which of the two underlies a Semitizing Greek text; cf. Segal, *o.c.*, pp. 5-9, 18, 70; S. A. Birnbaum, *Das hebräische und aramäische Element in der jiddischen Sprache*, Leipsic 1922; M. H. Goshen-Gottstein, *Text and Language in Bible and Qumran*, Jerusalem-Tell Aviv, 1960, p. 128; H. M. Cohen, *Schets der Ontwikkeling van het Hebreeuws tot Moderne Omgangstaal* (i.e. Sketch of the Development of Hebrew towards a Modern Spoken Language), Amsterdam, 1951.

¹ The knowledge of Greek among Jews in 1st century Palestine (and in later times) is discussed by: S. Lieberman, *Greek in Jewish Palestine*, New York, 1942; J. N. Sevenster, *Do you know Greek? How much Greek could the first Jewish Christians have known?* Leyden, 1968. For Biblical Greek as the use of language of a specific literary-religious genre: N. Turner, *The 'Testament of Abraham': Problems in Biblical Greek*, New Testament Studies I, 1954-55, p. 219 ss. especially 222-223.

sect, this manuscript tradition may have covered two centuries or more.

Of these modernizing tendencies we can be aware only by comparing the Biblical texts of Qumran with the Masoretic text. In this way it appears that there was in the language of the Isaiah text a tendency at work to avoid the consecutive waw-tenses and to replace them, resp. wayyiqṭōl¹ by wqṭl, and wəqāṭal by wyqṭl. Furthermore some of the so-called prophetic qāṭal-tenses have been replaced by yqṭl, and some yiqṭōl-tenses with a contextual value of past time by qṭl.²

It can therefore not be supposed with regard to the Non-Biblical Qumran texts that these are of a different character and display consistency in the use of the verb categories. As these texts are also copies of older documents, the same modernizing tendencies are likely to have been at work in them, but in this case we have no means of knowing to what degree; old and new occur here side by side: conversive waw-tenses are still present, but how many others have been replaced by qṭl? ³ All this means that we had better not adduce this kind of Hebrew, unless we know that the language which underlies the Apc. is classicistic, too.

The tendencies which have been noticed in the Qumran Isaiah scroll reveal some traits of the development which the Hebrew language underwent after the exilic period. They are in line with the characteristics of the variety of Hebrew in which the Mishnah has been composed except where it contains O.T. quotations. The Mishnah it is true, was definitely drawn up c. 200 A.D., but that

¹ We use the terms qāṭal and yiqṭōl instead of the traditional and confusing "perfect" and "imperfect".

² M. Burrows, *Orthography, Morphology and Syntax of the St. Mark's Isaiah Manuscript*, J.B.L. 68, 1949, p. 195 ss. A. Rubinstein, *Notes on the Use of Tenses in the Variant Readings in the Isaiah Scroll*, Vetus Test. III, 1953, p. 92, and *Singularities in Consecutive-Tense Constructions in the Isaiah Scroll*, Vetus Test. V, 1955, p. 180 ss.

³ Cf. M. H. Goshen-Gottstein, *Text and Language in Bible and Qumran*, Jerusalem-Tell Aviv, 1960, pp. 125-126; S. J. de Vries, *The Syntax of Tenses and Interpretation in the Hodayoth*, Revue de Qumran V, 1965, pp. 375-414 (p. 414: the Qumran consecutive wyqṭl is a "wooden use").—The same applies to some of the post-exilic O.T. books, see H. Striedl, *Untersuchung zur Syntax und Stilistik des hebräischen Buches Esther*, Z.A.W. 55. (N.F. 14), 1937, p. 73 ss. The opening lines of this article run: "Die Syntax des Estherbuches zeigt einen auffälligen Mischcharacter, der junge und alte Spracherscheinungen nebeneinander aufweist. Er ist verursacht durch die nicht immer geglückte Tendenz des Verfassers, ein möglichst altes, klassisches Hebräisch zu schreiben."

does not mean that the language dates from that time, the Mishnah being a collection of material dating from the two centuries which preceded its final redaction.¹

We are of the opinion therefore that this Mishnaic Hebrew is the best basis for comparison with the use of Greek in the Apc., first because it is contemporary with this book, second because it is not classicistic but reveals the development of Hebrew after the O.T. period, and third because the quantity of literature composed in it is sufficient.

What we have already surmised from the Isaiah scroll is here very clear: the conversive waw-tenses have disappeared except from Biblical quotations, the two verb tenses have adopted values of time, but have given up the opposition non-cursive *vs.* cursive. Cursivity is now expressed by a complete set of periphrastic constructions. As to the Hebrew of the Murabba'āt documents we can say that it is in line, or rather, not conflicting with this Mishnaic Hebrew.²

Though it may seem rather obvious to adduce Mishnaic Hebrew by the side of Biblical Hebrew when discussing the Apc., it is left out of account by Lancellotti in his work on the use of tenses in the Apc.³ This author compares only with Biblical Hebrew and reaches in our opinion unsatisfactory results due to this restriction. It is of course evident that influence from the Hebrew of the O.T. cannot be excluded. Via the LXX-version or directly from the Masorah it will have had its impact on the use of Greek of St. John, especially if we consider the many O.T. quotations and reminiscences which the Apc. contains.⁴

12.3.1.3. *Contemporary Aramaic.* As to Aramaic: the position that we have assigned to Mishnaic Hebrew with regard to the Apc.

¹ Segal, *o.c.*, pp. 150-160. His use of the term "Mishnaic Hebrew" is somewhat anachronistic, covering the period 300 B.C.-300 A.D. (p. 1).

² J. v. d. Ploeg has shown that compared with the use of tenses in the O.T. Book of Habacuc the Qumran Habacuc-commentary shows changes in the use of the verb which are likewise in line with the development towards the Mishnaic tense system: *L'usage du parfait et de l'imparfait comme moyen de datation dans le commentaire d'Habacuc*, Les Manuscrits de la Mer Morte, Colloque de Strasbourg 1955, Paris 1957, pp. 25 ss., especially p. 33.

³ A. Lancellotti, *Sintassi Ebraica nel Greco dell'Apocalisse*, vol. I. *Uso delle forme verbali*, Collectio Assisiensis 1, Assisi 1964.

⁴ See *a.o.* Charles, *o.c.*, I, pp. LXVI-LXXXII; C. Smits, *Oud-Testamentische Citaten in het Nieuwe Testament*, Collectanea Franciscana VIII-2, vol. II, 's-Hertogenbosch 1955, pp. 300-301; A. Vanhoye, *Ezéchiel dans l'Apocalypse*, Biblica 43, 1962, pp. 436-476.

is probably held by the Aramaic of the Palestinian Pentateuch Targum,¹ because the other Aramaic dialects known, the dialects found in Sardes and Egypt, Babylonian Aramaic, *etc.*, are not attested in documents dating from the N.T. period. This Pentateuch Targum which until recently had been preserved only in fragments, is considered by Kahle and others to contain the Aramaic that was spoken in Palestine by Jesus' time.² One of the arguments to this conclusion is the fact that this Targum contains a considerable quantity of Greek loan words, which would point to a Hellenistic environment.³ A comparison of this translation with the Masorah shows the same linguistic tendencies as those present in the Isaiah scroll: the Hebrew consecutive waw-tenses are of course rendered by qəṭal, *etc.* because Aramaic never had these waw-tenses; futural wəqāṭal is rendered by wəyiqṭōl, but past wəqāṭal by waqəṭal (*e.g.* Gen. XXXI 37), wayyiqṭōl is rendered by waqəṭal. There are of course exceptions: the four past wəqāṭal tenses occurring in Gen. XXIX 3 are rendered by wəyiqṭōl, but this rendition probably means that the translator took *v.* 8 already into account: the wəyiqṭōl verbs of *v.* 3 are then to be understood as past futures. As to the remaining uses of the Masoretic verbs: past yiqṭōl is represented by qəṭal or participle, futural qāṭal and yiqṭōl by yiqṭōl or participle.⁴

The little Aramaic preserved in the Murabba'at documents does not differ in the use of tenses from the Palestinian Pentateuch Targum, except for papyrus *nr.* 18 line 6 in which there occur two verbs, אפרונך and ואפשר, that have been rendered by the editors as *ithpael*s with a futural value. This would be contrary⁵ to the value of past time which the pə'al (pa'el and aph'el, and their reflexives:

¹ Edition: P. Kahle, *Masoreten des Westens II*, Stuttgart 1930; the most extensive fragment covers Gen. XXVIII 17–XLVIII 20.

² Cf. Black, *o.c.*, pp. 15–28.

³ Cf. Black, *o.c.*, p. 22.

⁴ Of the recently published Cod. Neofiti I which contains the complete Palestinian Targum I have checked only Gen. XI 25–XII 15 and XXII 1–13, of which Rev. R. Zuurmond, Delft-Holland has kindly given me the copies. The Masoretic wayyiqṭōl-tenses have here been rendered by qəṭal, the qāṭal-tenses with past-time value by qəṭal or by the participle (Gen. XII 4), the futural wəqāṭal and the futural-modal yiqṭōl by yiqṭōl; יָדַעְתִּי is once rendered by participle plus pronoun (XII 11), once by qəṭal (XXII 2, meaning "I have learnt" ?); in XXII 2 אָהַבְתָּ is rendered by רַחַמַת, which may be a qəṭal or the participle with suffix *-ath* or *-t* cf. Odeberg, *o.c.* II, pp. 12–13.

⁵ Cf. Odeberg, *o.c.*, II, p. 10, and our preceding note.

ithpə'el etc.) had in this period. These verbs have been translated: "(l'argent) te sera payé" ("l'argent" does not represent an Aramaic word, but has been supplied) and "il soit remboursé".¹ However, we think it possible to consider both verbs as 1st. p. sg. yiqṭōl-tenses, and should like to translate "I shall pay you" and "I shall settle the account". Moreover, the editors had to assume that in their ithpə'els the ת had been assimilated to the following פ.² The element *ith-* is, however, written with ת and *plene* in line 2: איתורי (because "primae waw"?); in line 6 we would then at least expect the orthography with yod: ואי(ת)פרוך, ואי(ת)פשר.³

The Aramaic of the Qumran Genesis Apocryphon presents the same difficulties as the Qumran Hebrew does. The work is probably earlier than the 1st century A.D. and may have been composed in the former half of the 1st century B.C.⁴ because its language is close to that of the Book of Daniel, and should therefore not be adduced in the first place for comparison with the use of Greek of the Apc. On the other hand the (Galilaeen) Aramaic parts of the Talmud and Midrashim are later than the N.T.; the Talmud was closed c. 425 A.D. and contains material from the preceding two centuries. Although we believe that the differences between this later Aramaic and that of the first century are only slight as far as the use of the verb categories is concerned, we leave it out of account as well as those dialects that are of still later times, like Christian Palestinian Aramaic and Babylonian Aramaic.

The dialect of the Targum Onqelos and Targum Jonathan was considered by Dalman to be the Judaeen variety of Palestinian Aramaic as spoken in the 1st century, but according to Kahle these Targums are of much later times and their idiom an artificial means to bridge the gap between Palestinian and Babylonian Aramaic.⁵ Moreover, both translate the O.T. Hebrew so closely that their

¹ P. Benoit-J. T. Milik-R. de Vaux, *Discoveries in the Judaean Desert*, vol. II Texts, Oxford 1961, pp. 102-103.

² Such an assimilation is for instance present in ἐφφαθ in Mark. VII 34 (i.e. אפתח).

³ Cf. M. Schlesinger, *Das aramäische Verbum im Jerusalemischen Talmud*, Berlin 1889, p. 11: "Bei der Assimilation wird die Vorsilbe (of the reflexive verbs) regelmässig mit Jod geschrieben."

⁴ J. Fitzmeyer, *The Genesis Apocryphon of Qumran Cave I*, Rome 1966, pp. 14-16 and 25.

⁵ G. Dalman, o.c., p. 40, and *Die Worte Jesu*, vol. I, Leipsic 1930 (2nd ed.); P. Kahle, *Das zur Zeit Jesu in Palästina gesprochene Aramäisch*, in *Opera Minora*, Leyden 1956, pp. 79-95. Cf. Black, o.c., pp. 19, 20, 22.

language can be called "translation Aramaic". It is beyond our competence to judge this problem, but we have noticed that there is hardly any difference in the translation of the O.T. verb tenses between all these targums;¹ Onqelos for instance renders the Biblical past *yiqṭōls* in *ch.* XXIX of Genesis by participles, and the futural *wəqāṭals* by *yiqṭōl*-tenses.²

12.3.1.4. *The Mishnaic Hebrew and Aramaic Voice System.*

As is born out by Segal's *Mishnaic Hebrew Grammar* there were differences between the Biblical Hebrew verb and the Mishnaic Hebrew verb, one of them being the reduction of the number of subsystems.³ The subsystems are:

in Mishnaic Hebrew:		non-intensive, non-causative:	intensive-causative	causative:
	active	qal (or: pā'al)	pi'el	hiph'il
	reflexive-passive	niph'al	nithpa'el	hoph'al
in Palestinian Aramaic:				
	active	pə'al	pa'el	aph'el
	reflexive-passive	ithpə'el	ithpa'al	ittaph'al

The differences between qal and pi'el and hiph'il, that is the differences in value between the Semitic subsystems, are alien to the Greek verb system;⁴ in what ways these Semitic categories

¹ For the use of tenses in later Aramaic see: Odeberg, *o.c.*, II, pp. 10, 92-94. M. L. Margolis, *Lehrbuch der Aramäischen Sprache des Babylonischen Talmuds*, Munich, 1910, pp. 76-79. L. Palacios, *Grammatica Syriaca*, Rome, 1954, pp. 178-182. (cf. F. Rundgren, *Das altsyrische Verbalsystem*, Acta Univ. Upsaliensis, XI, 1960, pp. 49-75). F. Schulthess, *Grammatik des christlich-palästinischen Aramäisch*, Hildesheim, 1965, gives hardly a description of the tense values (p. 87).

² Edition A. Sperber, *The Bible in Aramaic*, vol. I, Leyden, 1959.

³ Segal, *o.c.*, pp. 62-64. Aramaic: Stevenson, *o.c.*, pp. 44, 88. Instead of the hiph'il some verb paradigms have a shaph'el in Mishnaic Hebrew, and in Aramaic the place of the pa'el may be taken by a palpel, that of the aph'el by shaph'el or haph'el.

⁴ The values of the different subsystems have been indicated only schematically. The intensive aspect of meaning of the pi'el (pa'el) includes a frequentative aspect and a plurative aspect which implies that the action is directed towards a plurality of objects (cf. A. Goetze, *The so-called Intensive of the Semitic Languages*, J.A.O.S. 62, 1942, pp. 1-8). The causative aspect of the pi'el (pa'el) and hiph'il (aph'el) includes a factitive aspect ("I make

may be reflected in the Apocalypse will be discussed in the next paragraph (12.3.1.5.). The Semitic opposition between active and reflexive-passive is paralleled in Greek by the opposition active *vs.* middle-passive.

Let us now look again at our figures. The problem was why the numbers of the active categories are always higher than those of the middle and passive, with only one exception: the passive perfect participle. In general this higher number of actives can probably be explained from the fact that the active voice is the unmarked member of the opposition active *vs.* middle-passive. That there is with regard to morphological categories such a correlation between "higher frequency" and "being unmarked" has been shown by Greenberg from a number of texts in different languages and belonging to different kinds of literature.¹

We shall now try to explain why exactly the medio-passive perfect participle is the exception to this general rule. From the above schemes of the Mishnaic Hebrew and Palestinian Aramaic verbal subsystems one might get the impression that all the Semitic categories occurred in twofold, in the active and in the reflexive-passive voice. There was, however, a category that did not take part in this opposition in spite of its traditional name: this is the so called "passive participle" which is found only in the *active* part of the system in the qal, not in pi'el, hiph'il. This will appear more clearly from the following survey which gives the Mishnaic Hebrew verb system, but on a reduced scale: only one personal category represents here the indicatives and imperatives, while the participles mentioned are only the masculine singular categories:²

him happy") and a declarative-estimative aspect ("I declare/judge him a fool"). Moreover, the pi'el could be privative (רָשָׁן "to remove ashes") and just as the hiph'il be denominative (כָּתֵף "to carry on the shoulder", הִנִּיב "to face south"). Finally the hiph'il could have an inchoative value (הִגִּיל "to grow up, to come of age"). See Segal, *o.c.*, pp. 61, 68, 69 and cf. R. J. Williams, *Hebrew Syntax*, Toronto, 1967, pp. 29-31.

¹ J. H. Greenberg, *Language Universals*, in *Current Trends in Linguistics III*, The Hague-Paris, 1966, pp. 61-112.

² We transcribe the Hebrew verbs in the traditional way, as the actual vocalization and pronunciation are unknown for the Mishnaic period: cf. Segal, *o.c.*, p. 23.

	qal	niph'al	pi'el	nithpa'el	hiph'al	hoph'al
past indicative (3rd p. sg. masc.)	qāṭal	niqṭal	qittēl	nithqaṭṭēl	hiqṭil	hāqṭal
fut. indicative (3rd p. sg. masc.)	yiqtōl	yiqqāṭēl	yəqaṭṭēl	yithqaṭṭēl	yaqṭil	yāqṭal
imperative (2nd p. sg. masc.)	qəṭōl	hiqqāṭēl	qaṭṭēl	nithqaṭṭēl	haqṭēl	—
infinitive	qəṭōl	hiqqāṭēl	qaṭṭēl	nithqaṭṭēl	haqṭil	—
participle	qōṭēl	niqṭāl	məqaṭṭēl	mithqaṭṭēl	maqṭil	māqṭāl
"pass. participle"	qāṭul	—	—	—	—	—
	active	passive	active	passive	active	passive

A similar diagram can be set out for Palestinian Aramaic.¹ To the active participle there would correspond two passive ones: qāṭul and niqṭāl vs. qōṭēl and so likewise in the Aramaic tenses. According to Segal qāṭul has a static value, it is perfective or gerundival, whereas niqṭāl is cursive and not gerundival; qāṭul means "killed, to be killed", and niqṭāl "being killed". This qāṭul category has therefore a place in the Semitic verb system which is quite different from that of the participles and it would be preferable not to call it "passive participle" but *e.g.* "gerundive".

In our opinion the truly passive participles niqṭāl, mithqaṭṭēl and māqṭāl are represented in the Greek Apocalypse by the middle durative participles; passive aoristic participles are not found in the Apc. The qāṭul category, however, found its closest parallel in the Greek middle perfect participle, which has even taken over the gerundival aspect in some passages *e.g.* XVIII 2 (*mss.*) παντὸς ὀρνέου ἀκαθάρτου καὶ μεμισημένου: Vulgate: *omnis volucris immundae et odibilis* (A: for ὀρνέου: θηρίου).

A second glance at our statistics may reveal that among the most frequent categories (pres. ind., dur. ptc., aor. ind., fut. ind.) there seems to be some disproportion between active and middle-passive in the former two as opposed to the latter (pf. ptc. left out of account: it represents no Semitic oppos. of voice).

This disproportion may be remodelled somewhat by subtracting from the act. pres. ind. and dur. ptc. the 33 instances of ἔχω and 61 of ἔχων, because they do not represent Semitic *verbs*, but nominal

¹ But this so-called passive participle is present in all the active sub-systems of the Aramaic verb: qəṭil, məqaṭṭal, maqṭal.

constructions. On the other hand we must remark in anticipation of *par.* 12.3.3.6 that to the figures of the fut. ind. we must add those of the aor. subj., as both reflect *one* Semitic tense. In this way our figures will become as follows:

	<i>pres. ind.</i>	<i>dur. ptc.</i>	<i>aor. ind.</i>	<i>fut. ind./aor. subj.</i>
act.	64	134	229	99
m-p.	5	11	83	35

We are aware of the fact that statistically spoken these collections are much too small for drawing any certain conclusions, nevertheless the facts which they seem to suggest are in line with the Semitic verb system. According to Segal it is one of the important differences between Biblical and Mishnaic Hebrew that in the latter the indicatives express no views on the action (or: aspects) but differences in time, the *qāṭal* being now a past, the *yiqṭōl* a futural-modal tense. In Biblical Hebrew both were timeless but correlated with a difference in view. No Semitic indicative, therefore, was the exact equivalent of the Greek *pres. ind.*, but another Mishnaic peculiarity was the use of the participles as timeless indicatives, *e.g.* *qōṭēl hu* "he is killing, he kills", and also *qōṭēl* only if the context makes it clear who the actor is. The cursive value of the participle was probably neutralized in this "finite use". It lies now at hand to suppose that the Greek *pres. ind.* in the Apc. represents this finite participle: both were timeless and neutral as to view on the action.¹ This may explain why the middle voice of the *pres. ind.* is less frequent than that of the *aor. ind.* and *fut. ind.*: it is comparatively rare for the same reason as the *m.-p. dur. ptc.*; both represented the participles of the *niph'al*, *nithpa'el* and *hoph'al*, which were on the whole less frequently used than the participle of the *qal*, and than the reflexive indicatives.

The *qāṭul* gerundive could be used in a similar way but it could not have a cursive value, but that of a perfective or even an adjective *e.g.* *qāṭul hu* "he has been killed, is dead" and also "has to be killed". In the Apc. this is found *e.g.* XXI 19 οἱ θεμέλιοι τοῦ τείχους τῆς πόλεως παντὶ λίθῳ τιμίῳ κεκοσμημένοι "the foundation stones of the city wall were (had been) adorned" not: "were (being) adorned".

12.3.1.5. *The Semitic Subsystems.* The oppositions between the non-intensive/non-causative *qal*, the intensive/causative *pi'el*, and

¹ C. C. Torrey, *The Apocalypse of John*, New Haven, 1958, p. 43.

the causative hiph'el are alien to the morphological system of the Greek verb. In all probability these semantic differences were rendered in Greek by the choice of different verbs: the Semitic morphological oppositions could only be approached by lexical oppositions in Greek. For instance, the opposition qāṭal *vs.* intensive qitṭēl *i.e.* "he killed" *vs.* "he slaughtered" may be represented in the Apc. by the pair ἀπέκτεινεν—ἐσφαξεν, *e.g.*

IX 5 ἵνα μὴ ἀποκτείνωσιν αὐτούς
vs. VI 4 ἵνα ἀλλήλους σφαξουσιν.

Many verbs, however, cannot be grouped in such pairs; in that case we have no means of knowing which they render, the qal or the pi'el.

With regard to the opposition qal *vs.* causative pi'el or hiph'el matters are slightly different. We hold it not improbable that this opposition has been circumscribed in the Apc. by ποιῶ *etc.* plus infinitive or plus ἵνα with following subjunctive (*resp.* future indicative) *e.g.*

III 9 ποιήσω αὐτούς ἵνα ἥξουσιν
XIII 13 ποιῇ . . . καταβαίνειν

Further instances are XIII 12, 15, 16, 17. A synonymous construction may seem to be δίδωμι plus infinitive *etc.* but this means rather "to permit, to allow" *e.g.* XIX 8 καὶ ἐδόθη αὐτῇ ἵνα περιβάληται βύσσινον λαμπρὸν καθαρὸν. One might suppose that this opposition could be paralleled morphologically by such pairs as δουλεύω "I am a slave" *vs.* δουλῶ "I enslave, cause to be a slave", but such pairs do not occur in the Apc. vocabulary.

Finally the reflexive value of the niph'al *etc.* could also be rendered by the reflexive pronoun, but this is done only in combination with the verb λέγειν at II 2, 9, 20 and III 9 (all four are participles); the middle λεγόμενος was probably avoided as it was ambivalent and could mean "who is called", as well as the intended "who calls himself". The nithpa'el could also have a reciprocal value, which was of course easily rendered by ἀλλήλων *etc.* (VI 4 and XI 10).

12.3.2. *The Use of Moods in the Apc. compared with the M-Heb. and Aram. System.* The Semitic and Greek verb systems had the following categories of mood in common: past and futural indicatives, imperative, infinitive and participle. Each language, however, had also categories of mood to which the other offered no parallel.

12.3.2.1. *Greek Moods without Semitic Counterparts.* The Semitic verb system lacked a special subjunctive category as well as a 3rd person imperative. The jussive and cohortative known from Biblical Hebrew are now obsolete and replaced by the *yiqṭōl*.¹ It is likewise the *yiqṭōl* whose value includes as it were that of the Greek subjunctive and 3rd person imperative. What we might expect then in the *Apc.* is on the one hand that these Greek categories will be infrequent, and on the other hand that futural indicatives will occur with the contextual value of a subjunctive or imperative.

The total number of subjunctives in the *Apc.* is 85, that of the futures 118. The former are therefore not especially rare. Moreover, 18 of these futures are used in *ms.* A as aoristic subjunctives *e.g.* III 9 ποιήσω αὐτοὺς ἵνα ἡξουσιν καὶ προσκυνήσουσιν, XXII 14 μακάριοι οἱ πλύνοντες τὰς σ[τ]ολὰς αὐτῶν ἵνα ἔσται ἡ ἐξουσία αὐτῶν ἐπὶ ss., and so likewise II 22, 25; III 9; IV 9-10; VI 4, 11; VIII 3; IX 4, 5, 20; XIII 12; XIV 13; XV 4; XVII 17; XVIII 14. Other manuscripts waver in these or in other passages between aor. subj. and fut. ind. *e.g.* IX 6 ⲕ οὐ μὴ εὐρήσουσιν (A: ευρωσιν), XIII 15 ⲕ: ὅσοι ἂν μὴ προσκυνήσουσιν (A: προσκυνησωσιν). We may suppose that the number of futural indicatives was originally somewhat higher, that of the aoristic subjunctives lower. The latter increased slowly by purposely or unintentional corrections made by copyists of different times. Especially the cursive *mss.* have aoristic subjunctives in the passages quoted, but these corrections are in many cases of an orthographical character only: λούσεις and λούσης, λούσομεν and λούσωμεν, were already homophones by the time when the *Alexandrinus* was written. Such a barbarism as ἵνα ἔσται in XXII 14, which has been retained by the manuscript tradition, shows that St. John did hardly distinguish between the two categories.

Third person imperatives occur in the *Apc.* in the following passages: II 7, 11, 17, 29; III 6, 13, 22 (all these containing the stereotype ὁ ἔχων οὖς ἀκουσάτω); XIII 9 εἴ τις ἔχει οὖς ἀκουσάτω; XIII 18 ὁ ἔχων νοῦν ψηφισάτω; XXII 11 (*mss.*) ὁ ἀδικῶν ἀδικησάτω ἔτι, καὶ ὁ ῥυπαρὸς ῥυπανθήτω ἔτι, καὶ ὁ δίκαιος δικαιοσύνην ποιήσάτω ἔτι, καὶ ὁ ἅγιος ἁγιασθήτω ἔτι (A omits: καὶ ὁ ῥυπ. ῥυπ. ἔτι); XXII 17

¹ See Segal, *o.c.*, *parr.* 104, 155; only a small number of mainly 2nd person jussives are still found in the *Mishna*: *parr.* 144, 205, 212.

(mss.) καὶ ὁ ἀκούων εἰπάτω (A: ἐπιατω)· ἔρχου, καὶ ὁ διψῶν ἐρχέσθω, ὁ θέλων λαβέτω ὕδωρ.

It is curious to see that the 3rd person imperatives occur in the same stylistic formula with the exception of XIII 9. This formula consists of the elements: article—participle (with or without object) or adjective—3rd person imperative—adverb, object or object sentence. The Semitic *yiqṭōl*-tense could have besides the futural and modal aspects a jussive aspect of meaning which was equivalent with the value of the 3rd person imperative; we may expect therefore that the futural indicatives in the Apc. betray incidentally a jussive or imperative colour, seeing that the use of the 3rd person imperatives is restricted to the formula mentioned. Instances of this jussive aspect are:

IV 9-10 καὶ ὅταν δώσουσιν τὰ ζῶα δόξαν *etc.* πεσοῦνται . . . προσκυ-
νήσουσιν . . . βαλοῦσιν.

VI 11 καὶ ἐρρέθη αὐτοῖς ἵνα ἀναπαύσονται χρόνον ἔτι μικρόν

IX 4 καὶ ἐρρέθη αὐταῖς ἵνα μὴ ἀδικήσουσιν τὸν χόρτον τῆς γῆς

XIX 7 χαίρωμεν καὶ ἀγαλλιῶμεν [καὶ δώ]σομεν (1st person)

XXII 18 ἐάν τις ἐπιθῇ ἐπ' αὐτά, ἐπιθήσει ὁ θ(εὸς) (A** ἐπ αὐτῶ) τὰς
πλήγας *etc.*

XXII 19 ἐάν τις ἀφέλῃ . . . ἀφελεῖ ὁ θ(εὸς) *etc.*

But as all the future indicatives in the Apc. refer ultimately to events “ὅσα δεῖ γενέσθαι μετὰ ταῦτα” (IV 1), it may be said that some jussive or compelling connotation is always present with them.

12.3.2.2. *Semitic Moods without Greek Parallels.* On the other hand the Semitic subsystem comprised the following categories which are absent from the Greek verb system:

a) Feminine indicatives and imperatives like *qāṭalāh* “she has killed” as opposed to *qāṭal* “he has killed”. These categories could not be rendered into Greek unless one added a feminine personal pronoun, but this is found only in XVIII 6 ὥς καὶ αὐτὴ ἀπέδωκεν.

b) The so-called “absolute infinitive”, a second infinitive category used in combination with another category of the same verb paradigm to convey the idea of intensity or emphasis *e.g.* *ἔπερ ἔπερ* “he killed certainly”. In the LXX this paronomastic construction is rendered by participle plus finite verb *e.g.* Gen. XXII 17 εὐλογῶν εὐλογῆσω σε καὶ πληθύνων πληθυνῶ or by substantive plus finite verb *e.g.* Gen. II 17 θανάτῳ ἀποθανεῖσθε (νητῇ ניה) “you will cer-

tainly die". According to Segal the absolute infinitive was absent from Mishnaic Hebrew but frequent in Aramaic.¹ This absence might be then one of the rare points of difference between the two languages that may be visible in translation, but Stevenson remarks that the absolute infinitive was infrequent in the Palestinian Talmud and Midrashim and that it is to be considered a classicistic turn in the Targumim².

In the Apocalypse there are only four passages which *might* reflect such a classicistic turn:

- III 17 πλούσιός [ε]ἰμι καὶ πεπλούτηκα "I am very rich"? but *cf.* Hosea XII 9 (Mas.)
- VI 2 καὶ ἐξῆλθεν ὁ νικῶν καὶ ἵνα νικήσῃ (*mss. om. ὁ*) "to gain a great victory"?
- XVI 9 καὶ ἐκαυματίσθησαν . . . καῦμα μέγα "they were heavily singed"
- XVII 6 καὶ ἐθαύμασα ἰδὼν αὐτὴν θαῦμα μέγα *cf.* Habacuc I 5 θαυμάσατε θαυμάσια, but Mas.: *והתמהמהו*)
- XVIII 6 διπλώσατε διπλᾶ κατὰ τὰ ἔργα αὐτῆς (X, C: τα διπλα), *cf.* Job XLII 10 ἔδωκεν δὲ ὁ κύριος διπλᾶ . . . εἰς διπλασιασμόν (but Mas.: *בשכר-תב*).

12.3.2.3. *The Use of the Participle.*

12.3.2.3.1. *The Participle Used as Finite Verb.* On the whole the position of the participles in the Semitic languages involved corresponds with that of the participle in Greek: both could be used attributively, as a conjunct participle (*e.g.* ὁ ἀνὴρ ἐξῆλθεν λέγων . . .) or be substantivated. There is, however, one exception. In Mishnaic Hebrew and in Aramaic the participle could be used in nominal sentences as a predicate noun without copula *e.g.* *המלכים קטלים* "the kings kill, are killing". If the context makes it sufficiently clear who or what is the subject of the participle the substantive or pronoun indicating this subject may be left out *e.g.* *קטלים* "they kill, are killing". As in this way this use of the participle comes very close to a finite verb, we shall refer to it as "the participle used as a finite verb" or shortly "the finite participle".

¹ *o.c.*, p. 165.

² *o.c.*, p. 53.

According to context this finite participle could have a value of present, past, or future time, or be "modal" *i.e.* have a subjunctive value, a jussive value, or convey the notion of potentiality. The cursive value which the participle has elsewhere is neutralized in this finite use.

The most natural Greek equivalent of this finite participle is the present indicative which is also timeless or omnitemporal, and in which the durative value has likewise been neutralized (*cf. par.* 11.2.3.3.7).¹

There are some passages in the Apocalypse where St. John uses the *Greek* participle as a finite verb:

- I 16 καὶ ἐκ τοῦ στόματος αὐτοῦ ῥομφαία δίστομος ὁξὺα ἐκπορευομένη "and a sword came out of his mouth",
- IV 2 καὶ ἰδοὺ θρόνος ἔκειτο ἐν τῷ οὐ(ρα)νῷ καὶ ἐπὶ τὸν θρόνον καθήμενος "and someone sat on the throne" (καθήμενος also in IV 4 and XIV 14).
- X 8 καὶ ἡ φωνὴ ἣν ἤκουσα ἐκ τοῦ οὐ(ρα)νοῦ πάλιν λαλοῦσαν μετ' ἐμοῦ καὶ λέγουσαν . . .
- XIV 1 καὶ ἶδον καὶ ἰδοὺ τὸ ἀρνίον ἐστὶ[ς] ἐπὶ τὸ ὄρος Σιών "and I saw and see! the Lamb was standing on Mount Sion" (ἐστηκὸς also in V 6)
- XXI 14 καὶ τὸ τεῖχος τῆς πόλεως ἔχων θεμελίους δώδεκα "and the city wall has twelve foundations" (ἔχων *etc.* also in I 16 (κ, C, 046); IV 7, 8; VI 2, 5; IX 17, 19; X 2; XII 2; XIX 12; XXI 12).

Medial participles: IV 5 καὶ ἑπτὰ λαμπάδες πυρὸς καίόμεναι ἐνώπιον τοῦ θρόνου either: "seven lamps were burning before the throne", or: "there were seven lamps *etc.*"; XIX 11 (κ) καὶ ὁ καθήμενος ἐπ' αὐτὸν πιστὸς καλούμενος. (A omits καλούμενος) "and he who sat on it was called . . ." ²

From these passages it appears that there are mainly two circumstances under which this *Greek* finite participle occurs in the Apc. The majority contain the participle ἔχων, and do therefore not reflect a Semitic participle, but nominal constructions like Heb. *יֹשֵׁב*, or Aram. *לֵיִשְׁבָּא*. It seems then as though St. John was here

¹ Cf. C. C. Torrey, *The Apocalypse of John*, New Haven 1958, p. 43.

² A list of these participles was already drawn up by S. Davidson, *Introduction to the New Testament*, vol. III, London 1851, p. 563-c.

off his guard and fell more easily into an un-Greek idiom. The remaining instances, except for I 16 and X 8, are either preceded in the same sentence by ἰδοὺ, or belong to greater parts introduced by ἰδοὺ (including two of the instances of ἔχων: VI 2 and 5). This reflects the Hebrew use of הִנֵּה , or the Aramaic הִנֵּה , הִנֵּה , which are deictic particles like Latin *ecce*, and no verbs. As ἰδοὺ, which had lost its former verbal character, is normally followed by the nominative case, our author apparently treats the participles following as conjunct with these nominatives (e.g. XIV 1), or as substantivations (e.g. IV 2). In some passages, however, he makes a shift from the nominative case to the accusative:

- IV 1 μετὰ ταῦτα ἴδον καὶ ἰδοὺ θύρα . . . 2. καὶ ἰδοὺ θρόνος . . .
 4. καὶ κυκλόθεν τοῦ θρόνου θρόνους
 VII 9 (κ) μετὰ ταῦτα εἶδον καὶ ἰδοὺ ὄχλος πολὺς . . . ἐστῶτες . . .
 περιβεβλημένους
 XIV 14 καὶ ἴδον καὶ ἰδοὺ νεφέλη λευκή, καὶ ἐπὶ τὴν νεφέλην
 καθήμενον

Here he seems to treat ἰδοὺ first as a particle like הִנֵּה , and then as if it were still an imperative, but it is conceivable that these accusatives still depend on (ε)ἶδον (cf. XIII 3 μίαν: v. 1 ἴδον). He is likewise at a loss in X 8 λαλοῦσαν, λέγουσαν (see above), where we would expect at least λαλοῦσα, or better ἐλάλει.

The Semitic qāṭul gerundive can be used in the same way as a finite verb. This may result in the use of the part. pf. m-p. as a perfect or pluperfect indicative: XXI 19 οἱ θε[μ]έλιοι τοῦ τείχους τῆς πόλεως παντὶ λίθῳ τιμίῳ κεκοσμημένοι "had been adorned" or "were adorned"; cf. IV 1 ἡνεωγμένη, XIX 13 περιβεβλημένος, XXI 12 ἐπιγεγραμμένα.

12.3.2.3.2. *Coordination of Participle and Finite Verb.* A second Semitic peculiarity in the use of the participle is that in a series of coordinated participles the last may be replaced by a finite verb. Ewald and Charles have drawn attention to the fact that this coordination of participles and finite verb is literally reproduced in the Greek of Apc. I 5-6: τῷ ἀγαπῶντι ἡμᾶς . . . καὶ ἐποίησεν ἡμῖν (κ, 025, 046: ημας): "to Him who loves us and who has relieved us . . . and *who has made us*".¹ Less evident are the following instances

¹ G. H. A. Ewald, *Commentarius in Apocalypsin Johannis exegeticus et criticus*, Leipsic, 1828, p. 45 (Apc. III 7 which he mentions among his instances does not belong here); Charles, *o.c.*, I, p. CXLIV-CXLVI.

mentioned by Charles, except for XIII 11 which has been found by Burney:¹

- I 18 ἐγὼ εἰμι . . . ὁ ζῶν καὶ ἐγενόμην νεκρός.
 II 23 ἐγὼ εἰμι ὁ ἐραυνῶν . . . καὶ δώσω
 VII 14 οὗτοί εἰσιν οἱ ἐρχόμενοι . . . καὶ ἔπλυναν . . . καὶ ἐλεύκαναν
 XIII 11 ἄλλο θηρίον ἀναβαῖνον ἐκ τῆς γῆς καὶ εἶχεν . . . καὶ ἐλάλει
 XIV 2-3 ὡς κιθαρωδῶν κιθαριζόντων ἐν ταῖς κιθάραις αὐτῶν καὶ ᾄδουσιν ᾠδὴν καινὴν
 XV 2 καὶ ἴδον . . . ἔχοντας κιθάρας τοῦ θεοῦ καὶ ᾄδουσιν
 XX 4 τῶν πεπολεμημένων (mss. πεπελεχισμένων) . . . καὶ οἵτινες οὐ προσεκύνησαν.

In the first three it is rather a copula (in Hebr.-Aram. a nominal construction) and an indicative that are coordinated, which is of course nothing peculiar;² XIII 11, XIV 2-3 and XV 2-3 can each be divided into two sentences, as it is actually done in the Nestle-edition and also by Charles himself. With regard to XX 4 Charles assumes οἵτινες to be an interpolation as it would make the whole sentence refer to two groups of people, but in our opinion this is not necessarily the case. The remaining four instances contain all a similar construction:

- II 2 τοὺς λέγοντας ἑαυτοὺς ἀποστόλους [καὶ] οὐκ εἰσὶν
 II 9 τῶν λεγόντων 'Ιουδαίους εἶναι ἑαυτούς, καὶ οὐκ εἰσὶν
 II 20 ἢ λέγο[υσα] ἑαυτὴν προφῆτιν καὶ διδάσκει[ι καὶ] πλανᾷ
 III 9 τῶν λεγόντων ἑαυτοὺς 'Ιουδαίους εἶναι καὶ οὐκ εἰσὶν ἀλλὰ ψεύδονται

In all probability these instances do not reflect the Semitic coordination in a direct way because οὐκ εἰσὶν would be in Mishnaic Hebrew **אֵין**, and in Aramaic **הֵין** (cf. the Syriac version: *lo ithayhun*); in II 20 καὶ διδάσκει etc. probably depends on the preceding ἀφεῖς in ὅτι ἀφεῖς τ[ὴν γυ]ναῖκά σου τὴν 'Ιεζάβελ ἢ λέγο[υσα] ἑαυτὴν προφῆτιν καὶ διδάσκει, cf. the Vulgate *quia permittis mulierem . . . docere*.

Sequences of participles could of course be ambivalent and cause some trouble to Jews who wanted to write Greek, because they

¹ C. F. Burney, *A Hebraic Construction in the Apocalypse*, Journal of Theological Studies, XXII, 1921, pp. 371 ss.

² Unless one wants to translate I 18: "the one who lives and who died".

had now to choose between using the participle or the indicative in Greek. We have seen above how our author decided when a **הָיָה** was involved. Another instance is found in John I 32 **τεθέαμαι τὸ πνεῦμα καταβαῖνον ὡς περιστερὰν ἐξ οὐρανοῦ καὶ ἔμεινεν ἐπ' αὐτόν** as compared with the following I 33 **ἐκεῖνός μοι εἶπεν· ἐφ' ὃν ἂν ἴδῃς τὸ πνεῦμα καταβαῖνον καὶ μένον ἐπ' αὐτόν, οὗτός ἐστιν etc.** The former may be translated either as "I have seen the Spirit descend like a dove *and it rested* on Him", or as "I have seen the Spirit descend . . . *and rest* on Him".

It is difficult to say whether the crucial and much discussed idiom **ὁ ὢν καὶ ὁ ᾔν καὶ ὁ ἐρχόμενος** (or **(ὁ) ὅσιος**) in I 4, 8, XI 17, and XVI 5 may be explained as such an instance of coordination of participle and finite verb. It has the appearance of a substantivated **ὁ ὢν καὶ ᾔν** cf. I 5-6 **τῷ λύσαντι . . . καὶ ἐποίησεν**, but in IV 8 the sequence is reversed: **ὁ ᾔν καὶ ὁ ὢν**. Peculiar is that the participle **ὢν** does not occur in the Apc. outside of this formula, in which it is a quotation from Exodus III 14 **Ἐγώ εἰμι ὁ ὢν**, cf. Jeremiah I 6, XIV 13 and XXXIX 17.¹

12.3.2.4. *The Hebrew (Aramaic) Verb with Pronominal Suffixes.* The sketches of the Mishnaic Hebrew and Aramaic verb systems which we have given above do not display the complete set of categories of which these systems exist. Each finite verb, imperative, infinitive or participle belongs namely to a paradigm of categories which are usually called the categories of the verbal object, or the pronominal categories.

The 3rd person sg. indicative **qāṭal**, "he killed" for instance, is not only in opposition to **qāṭālāh** "she killed", **qāṭaltā** "you (masc.) killed" etc., but also to: **qəṭālani** "he killed me", **qəṭāləkha** "he killed you (masc.)", **qəṭālēkh** "he killed you (fem.)", **qəṭālō** "he killed him", **qəṭālāh** "he killed her", etc. Likewise **qāṭalti** "I killed" is not only opposed to **qāṭal** "he killed", **qāṭālāh** "she killed", etc., but also to **qəṭāltikhā** "I killed you (masc.)", **qəṭaltim** "I killed them (masc.)", etc. etc.

Such categories as **qəṭālani**, **qəṭāləkha**, **qəṭālēkh**, etc. have in common that they refer to the 3rd pers. sg. masc. "he". They differ

¹ To **ὁ ᾔν** may be compared the following passages in the Hebrew OT in which verbs occur with the article prefixed: Jos. X 24; 1 Chron. XXVI 28, XXIX 8 and 17; 2 Chron. XXIX 36; Ezra VIII 25; X 14 and 17; Jer. V 13 (Gesenius-Kautzsch, *o.c.*, *par.* 138-i). According to Segal this usage did not occur in Mishnaic Hebrew (*o.c.*, p. 182).

from one another in their reference to a further person. The meaning of e.g. qəṭaltani "you (masc.) killed me" implies *a.o.* that there is a relation between the action (q . . ṭ . . l) and the 2nd pers. sg. masc. (-ta-), and that this complex in its turn has a relation to the first pers. sg. (-ni), schematically:

(2nd pers. + action) × 1st pers.

Only the 3rd persons can be referred to twice by the same word: qəṭālō, qəṭālattā, qəṭālūm, qəṭālūn, but these verbs can never have a reflexive value: the two 3rd persons referred to do not point to identical men or women.

The infinitives which take part in these categories are not different from the paradigm of the so-called possessive suffixes, except in the 1st person sg.: qāṭlēni "to kill me" by the side of qāṭli "my killing" or "to kill me".¹

In Greek where such a system is lacking, each of these categories is reflected or rendered by a verb with a separate personal pronoun. As the form differences between qəṭālani, qəṭālēkhā, qəṭālō, *etc.* are mainly situated in the *ends* of these words, it need not wonder that the personal pronouns which represent them are placed *immediately after* the verb in Semitizing Greek.² This is the tendency in those LXX-books that have been translated and also in the Apc. of St. John.

In *ms. A* the personal pronouns (oblique cases) immediately follow the verb 139 times, whereas they precede the verb in only 14 passages, of the accusatives among them 57 follow and 11 precede the verb. In five of these 11 the pronoun precedes an infinitive, but follows on the finite verb on which this infinitive depends (perhaps also at XX 3, where *ms. A* has δεῖ λυθῆναι αὐτόν, but *Σ* reads δεῖ αὐτόν λυθῆναι), and in two of them the pronoun precedes both infinitive and the finite verb: XI 5 αὐτοὺς θέλει ἀδικῆσαι (also in XVII 10). Since more than half of the number of verbs that are preceded by the pronoun are infinitives, the question may be raised how many times the pronoun comes *after* the infinitive in the Apc. The subjective accusative pronouns are placed before the infinitive in X 11, XI 5, XIII 10 (*A* omits δεῖ), XVII 10, possibly also in XX 3. All these passages contain the verb δεῖ plus infinitive. The objective

¹ Cf. Gesenius-Kautzsch, *o.c.*, *par.* 61-a (*pp.* 169-170).

² A. Wifstrand, *Die Stellung der enklitischen Personalpronomina bei den Septuaginta*, Bulletin de la Société Royale des Lettres de Lund, 1949-1950, *pp.* 40-70.

accusatives waver: they come before the infinitive in III 16 and XI 5 bis, but after the infinitive in III 8, V 3, 4 (A *om.*), VII 9, XI 6, XIII 7 (A *om.*), XVI 14, XX 8. Combinations of two accusative pronouns, one indicating the subject, the other the object, are absent from the Apc.,¹ probably because Hebrew did not have such a construction².

The position of the pronoun before infinitives depending on δεῖ may be explained in our opinion from the fact that this construction does not reflect a Semitic verb with object suffix, but in all probability a yiqṭōl tense with jussive value. The impf. ἔδει does so twice in Ezek. XIII 19, and if in Apc. III 16 μέλλω σε ἐμέσαι the periphrasis likewise represents a yiqṭōl with object suffix, the position of σε after the finite verb is understandable. It is however hard to say why exactly the remaining two exceptions, which both happen to contain the verb θέλω (Hebrew רָצָה, רָצִיתִי) have preposed pronouns: XI 5 αὐτοὺς θέλει ἀδικῆσαι, and XI 5 θελήσῃ αὐτοὺς ἀδικῆσαι (chiastic?). The Greek sequence verb—pers. pronoun does not exclusively reflect Semitic verbs with object suffix, but also verbs followed by pseudo-pronouns like אֲנִי. As these latter could also precede the verb our exceptions may find their explanation here, together with the instances of finite verb preceded by a pronoun (I 7, III 10, XII 15, XVII 16).³

12.3.3. *The Use of the Durative, Aoristic, Futural and Perfective Categories.*

12.3.3.1. *Introduction.* We have seen that in Mishnaic Hebrew and in Aramaic the qāṭal tense had become a *past* tense, and the

¹ The position of subjective and objective accusative pronouns with infinitives in the N.T. is discussed by: H. R. Moeller-A. Kramer, *An overlooked structural Pattern in New Testament Greek*, Novum Test. V, 1962, pp. 25 ss.

² Cf. C. Brockelmann, *Hebräische Syntax*, Neukirchen, 1956, p. 152.

³ According to C. Brockelmann (*Hebräische Syntax*, Neukirchen 1956, p. 90) these pseudopronouns were frequent especially in the Prophetiae Priores, but in the Books of Chronicles they were used only for special reasons (e.g. to indicate a second object with a verb plus object suffix): see A. Kropat, *Die Syntax des Autors der Chronik verglichen mit der seiner Quellen*, Beiheft Z.A.W. 16, 1909, p. 36. In Mishnaic Hebrew according to Segal the object suffixes are used "somewhat less frequently than in BH, their place being taken by אֲנִי" (o.c., p. 95). As to the finite verbs with preposed pronoun: in Apc. III 10 perhaps for emphasis or contrast; in I 7 and XVII 16 chiastic: verb plus pronoun followed by pronoun plus verb (cf. also with one another the above quoted parts of XI 5); for XII 15 we have no explanation (cf. XVII 16).

yiqtōl a *futural-modal* tense. Both referred to the action as such without any durative notion. The participle on the other hand, when used as a finite verb, was omnivalent: it could refer to the past, present or future, and it could express the durative view of the action, or be neutral in this respect. The Semitic imperative and infinitive were likewise non-durative, the participle, however, was durative, but not necessarily so when it was used as a finite verb.

If the durative view had to be expressed in an unambiguous way one could use in these languages periphrastic constructions consisting of the verb "to be" (Hebrew הָיָה, Aram. הָוָה) and a participle: הָיָה plus ptc. had a past durative value, הָיָה plus ptc. a futural durative value. Generally speaking these constructions which were so frequent in Hebrew and Aramaic, are not represented in the Apc. by the corresponding Greek periphrases. These occur only in two passages:

I 18 καὶ ἐγενόμην νεκρὸς καὶ ἰδοὺ ζῶν εἰμι.

III 1-2 ὅτι ζῆς καὶ νεκρὸς εἶ. γίνου γρηγορῶν.

In both the periphrasis is chiastically opposed to a preceding copula plus adjective, and that may be the reason why it is used at all.¹

In what ways then is the difference between the Semitic non-durative verb and the durative periphrasis reflected in the Apocalypse? The former (qāṭal, yiqtōl, imperative, infinitive) find their natural equivalents in the 429 aorist indicatives, 118 future indicatives (plus 68 aorist subjunctives), 59 aorist imperatives, and 72 aorist infinitives. As the Semitic participle was durative it is certainly represented by the 295 durative participles, and it need not surprise that the non-durative aorist participle, a category that had no counterpart in the Semitic verb system, occurs only 11 times in the Apc. The Semitic durative periphrases are in all probability reflected by the 19 imperfects, the 17 durative subjunctives (plus the 5 instances of μέλλω/ἔμελλον with durative infinitive), the 27 durative imperatives, and the 19 durative infinitives.² These figures which are much lower than

¹ XVI 10 ἐγένετο . . . ἐσκοτωμένη is a doubtful case; it does not reflect a hoph'al participle plus הָיָה, because that would have resulted rather in ἐγένετο σκοτωμένη.

² The number of imperfects found in *ms. A* has been increased by 3 and lowered by 3; we have added I 12 ἐλαλει, V 4 ἐκλειον and VI 8 ἠκολούθει, as

those of the aoristic verbs, may be explained from the fact that the duratives were the *marked* members of the opposition durative *vs.* aorist, and marked categories tend to be less frequently used than unmarked ones¹.

12.3.3.2. *The Present Indicative.* It has already been exposed that the so called "finite participle" of the Semitic languages is reflected in Greek by the present indicative. This does not mean however, that the 238 present indicatives (249 if οἶδα is included), which occur in the Apc. are exclusively reflections of these finite participles: a great number of them, 113 which is nearly 50% are the verbs ἔχω and εἰμί. Of these verbs the former reflects

the majority of *mss.* have here imperfects against *ms. A.* On the other hand we have cancelled VII 2 ἐκράζεν (*mss.* ἐκράξεν), while III 2 (X 4) ἐμελλον has not been included in the number of imperfects as it was probably an indifferent past tense: the aorist ἐμέλλησα does not occur in the LXX, N.T. and Apostolic Fathers. For the same reason we did not reckon as imperfects the 16 occurrences of the past indicative of εἰμί and the verb ἔκειτο (IV 2). We have maintained XXII 8 ἐβλεπον although it is found in *ms. A.* only. The passage runs ὅτε ἤκουσα καὶ ἔβλεπον, ἔπεσα; the variant readings ἐβλεψα and εἶδον try to bring ἐβλεπον into line with the aorists; ἐβλεπον is therefore evidently the *lectio difficilior* and probably correct.

¹ J. H. Greenberg, *Language Universals*, in: *Current Trends in Linguistics III*, The Hague-Paris, 1966, pp. 61-112. However, the number of 19 imperfects is extremely low in comparison with 429 aorists, and cannot be wholly explained in this way. Compare the proportions in the Gospel of St. Luke: aor. ind. 511, imperfect ind. 175 (computed from S. Antoniadis, *L'Evangile de Luc, Esquisse de grammaire et de style*, Paris, 1930, and Bruder's N.T. concordance; the past indicatives of εἰμί have been excluded: see previous note). To our regret we have no figures of the aorists and imperfects in the Gospel of St. John, since E. A. Abbott's *Johannine Grammar* (London, 1906) does not give any statistics or lists of forms. It appears, however, from the chapter on the use of tenses (pp. 318 ss.) that imperfects and perfect indicatives are not of rare occurrence in the 4th gospel, and even that the pluperfect (which occurs once in the Apc.) is "*perhaps more frequent in John than in any of the Synoptists*" (p. 348). We have the impression that the low number of imperfects may be due to the fact that the past time durative could be expressed by two Semitic idioms: by the past periphrastic construction הָיָה plus participle, and by the finite participle with contextual value of past time. As this latter was unmarked in opposition to the former we may surmise—with Greenberg's article in mind—that it was also more frequent than the former. This is indeed the case as far as the Apc. is concerned: the Greek categories which represent the Semitic finite ptc. with past value are the 24 Greek participles which are used in that way and the 42 historical presents of which 25 have a contextual durative value. The lower number of imperfects is therefore due to the competition of these latter and of the 24 finite participles. (The total number of historical presents in the Apc. is comparatively high: St. Luke did not often use it, Antoniadis mentions only 4 instances (p. 245), but does probably not claim completeness; cf. Blass-Debrunner, *o.c.*, par. 321).

Semitic constructions which do not contain a verb, while εἰμί may do so, especially when it is a copula.

The present indicative is used in the Apocalypse in the following ways:

12.3.3.2.1. *General Present*: 6 times *e.g.* X 3 καὶ ἔκραξεν φωνῇ μεγάλῃ ὥσπερ λέων μυκᾶται. A doubtful instance is I 16 ἡ ὄψις αὐτοῦ ὡς ὁ ἥλιος φαίν(ε)ι because φαίνει may be connected with ὄψις or with ἥλιος.

12.3.3.2.2. Present used by Christ or St. John when directly addressing the reader (or hearer): 11 times, especially in chapter XXII. A very brusque interruption of this kind is XVI 15 ἰδ[οὺ] ἔρχομαι ὡς κλέπτης *ss.* (16: καὶ συνήγαγεν αὐτοὺς *ss.*).

12.3.3.2.3. Present used by Christ, St. John or the "angelus interpretes" *when making explanatory remarks* from within the visions: 42 times. *e.g.* XVII 18 καὶ ἡ γυνὴ ἣν ἵδές ἐστιν ἡ πόλις ἡ μεγάλη. Some of these remarks have the character of "stage asides" *e.g.* XX 14 οὗτος ὁ θάνατος ὁ δευτέρος ἐστιν ἡ λίμνη τοῦ πυρός. The dividing lines between these remarks and the other headings which we have distinguished are not always very clear: 13 of these instances come also under 4) but have not been counted there for the second time. Ambivalent cases are: XII 5; XIV 4 and 5; XVI 21; XVII 14; XX 3.

12.3.3.2.4. Present in reported speech: 111 times plus 10 times οἶδα, of which 62 (and 9 × οἶδα) occur in the Letters to the Seven Churches (*ch.* II-III). One instance is found in "reported thought": XII 12 κατέβη ὁ διάβολος . . . εἰδὼς ὅτι ὀλίγον καιρόν ἔχει.

12.3.3.2.5. Historical present: 42 times, plus once οἶδα (XIX 12).

12.3.3.2.6. Futural present: 39 times; the present indicative occurs five times where we would expect a futural subjunctive (XI 5; XIV 4, 9, 9 and 11), *e.g.* XIV 9 εἴ τις προσκυνεῖ τὸ θυσιαστήριον (so A, but *mss.* θηρίον) . . . καὶ λαμβάνει . . . 10. καὶ αὐτὸς πίεται *etc.*

Headings 5) and 6) amount together to nearly the third part of the total number of present indicatives. This is due to the following facts: In recounting visions and dreams an author usually starts by using a past tense expressing something like "I heard" or "I saw". This is also the case in the Apocalypse: all the indicatives which pertain to St. John's act of seeing or hearing are past tenses *e.g.*

I 9 Ἐγὼ Ἰωάννης . . . ἐγενόμην ἐν τῇ νήσῳ τῇ καλουμένῃ Πάτμῳ . . .

10. ἐγὼ ἐγενόμην ἐν πν(εύματ)ι ἐν τῇ κυριακῇ ἡμέρᾳ καὶ ἤκουσα *etc.*
 12. καὶ ἐπέστρεψα . . . [κ]αὶ ἐπιστρέψας εἶδον . . . IV 1 μετὰ ταῦτα
 ἶδον V 1 καὶ ἶδον . . . 2 καὶ ἶδον VI 1 καὶ ἶδον . . . 2 καὶ ἶδον . . . 6
 καὶ ἤκουσα *etc. etc.* up to XXII 8 καὶ ὅτε ἤκουσα καὶ ἔβλεπον ἔπεσα *etc.*

The contents of the visions can of course also be told in past tenses and St. John usually starts in this way *e.g.* IV 2 ἔκειτο V 3 ἠδύνατο *etc. etc.* all together 31 instances. However, in IV 5, V 5, VI 16, VII 10, VIII 11, XIV 3, XV 3, XVI 21, the author switches over to a present indicative, and he does so immediately after the introducing εἶδον, ἤκουσα, *etc.*, in XII 2, 4; XVI 14; XIX 9, 11.¹ These shifts indicate that he is no longer telling what he saw in the past, but rather what he is seeing again before his eyes, and as such these present indicatives give the idea of lively representation. Similar shifts have also been noticed in dream accounts that have come down to us in Egyptian papyri *e.g.* P. Par. 51 (160 B.C.) lines 2-4 ὦμ[την] βατίζειν (= βαδίζειν) με ἀπὸ λειβὸς ἕως ἀ[πηλι]ώτου καὶ ἀναπίπτομαι ἐπ' ἄχυρον. 5. ἀναπίπτει 7. ἦσαν . . . ἀνύγω (= ἀνοίγω). 9. ὁ ρῶ. 10-11. ἐκάλεσαν, προσέλεγον *etc.*

The same phenomenon can be observed in the opening lines of the Shephard of Hermas, *Visio* I, 1, 3-6 (parts in direct speech excluded):

καὶ πνεῦμά με ἔλαβεν καὶ ἀπήνεγκέ με . . . ἐδύνατο . . . ἦν . . . ἦλθον . . .
 τιθῶ . . . ἡρξάμην. 4. ἡνοίγη ὁ οὐρανὸς καὶ βλέπω . . . ἐπεθύμησα.
 5. λέγω . . . ἀπεκρίθη. 6. λέγω . . . φησὶν *etc.*

A further complication in the Apocalypse is the fact that the visions are supposed to predict future events: I 1 δεῖξαι τοῖς δούλοις αὐτοῦ ἃ δεῖ γε[νέ]σθαι ἐν τάχει and 19 γράψον οὖν ἃ ἶδες καὶ ἃ εἰσιν καὶ ἃ μέλλει γέινεσθαι μετὰ ταῦτα. This may account for the shifts to the future indicative usually via the intermediary stage of (historical or futural) presents. Immediate transitions from past tense to future tense are: XIII 7 ἐδόθη . . . 8 προσκυνήσουσιν²; XXII 1 ἔδειξεν . . . 3 ἔσται . . . 3 ἔσται . . . λατρεύσουσιν.

Via the present indicative:

IV 8 ἔχουσιν . . . 9. δώσουσιν . . . 10. πεσοῦνται . . . προσκυνήσουσιν
 . . . βαλοῦσιν.

VII 14 εἶπεν . . . εἰσιν . . . ἔπλυναν . . . ἐλεύκαναν (pf. value) . . .

¹ The author switches over to the perfect indicative ἐστήκασιν in VIII 2, but this verb probably has the value of a present indicative and expresses a usual situation.

² This verb may also have a final-consecutive value.

- 15 εἰσιν... λατρεύουσιν... σκηνώσει 16 π(ε)ινάσουσιν... διψήσουσιν.
17. ποιμανεῖ... ὀδηγήσει... ἐξάλ(ε)ίψει
- IX 4 ἐρρέθη... ἔχουσιν 5. ἐδόθη... 6. ζη[τήσου]σιν... ἐπιθυμή-
σουσι]ν
- XVIII 4 ἤκουσα... 7. λέγει... 8. ἤξουσιν... κατακαυθήσεται *etc.*
15 στήσονται.
- XIX 14 ἠκολούθει... 15. ἐκπορεύεται... ποιμανεῖ... πατεῖ...
16. ἔχει...
- XX 4 ἐκάθεισαν... ἐβασίλευσαν. 5. ἔζησαν 6. ἔχει... ἔσονται...
βασιλεύουσιν... 7. λυθήσεται. 8. ἐξελεύσεται
- XXI 22 ἴδον... ἔστιν... 23. ἔχει... ἐφώτισεν... 24. περιβατήσουσιν
... φέρουσιν... 25. ἔσται... 26. οἴσουσιν.

The reverse shift is also found a number of times:

- XI 1 ἐδόθη... λέγων (plus direct speech). 2. μετρήσουσιν 3.
δώσω... προφητεύσουσιν *etc.* 4. εἰσιν... 5. ἐκπορεύεται...
κατεσθίει... δ(ε)ῖ... 6. ἔχουσιν (bis)... 7. ποιήσει...
νικήσει... ἀποκτενεῖ *etc.* 11. εἰσῆλθεν... [ἔστη]σαν...
ἐπέπεσεν; verses 12-14 contain 8 more past tenses; here
the direct speech contains a prophecy in futural and
present tenses which becomes more and more picturesque
until it suddenly falls back into the past tense again.
- XVIII 15 στήσονται... 16. λέγοντες (plus dir. speech) 17. ἠρημώθη
... ἐργάζονται... ἔστησαν 18. ἔκραζαν 19. ἐπέβαλον.
- XX 8 ἐξελεύσεται 9. ἀνέβησαν... ἐκύλευσαν... κατέβη... κατέ-
φαγεν... 10. ἐβλήθη... βασανισθήσονται

In our opinion it is unnecessary to see behind these shifts of time the inability of an author who could not handle the Greek tenses. Lancellotti, the only scholar who has thusfar devoted a special study to the use of tenses in the Apocalypse holds the view that these "haphazard" shifts (*cf.* Bousset: "das "regellose Schwanken") can be accounted for by assuming the Biblical Hebrew verb system as the underlying substrate. St. John's wavering between past and present, present and future is according to him due to the timelessness of both the Biblical Hebrew indicatives. If the influence of Biblical Hebrew were so strong still that St. John could not clearly distinguish between present and future tenses it is difficult to understand why he did not avoid to use the Greek future at all. The present indicative could then be used either as a present, past or future tense and the aorist as a past tense. Lancellotti's point of

view would be proved if in the Apocalypse future indicatives were misused for past tenses or with the value of present time (for alleged instances see *par.* 12.3.3.7), or if aorists were used as presents or as futures. As long as this is not the case we think it more probable to assume that the underlying Hebrew had developed to a great extent towards Mishnaic Hebrew or was perhaps already identical to it.

As it is, the transitions to the future tense in the Apc. are usually preceded by another kind of transitions, namely those from a past tense to the present indicative. Such a use of tenses seems quite natural for an author who has to recount visions actually seen, or pretended to have been seen, in the past, but which at the same time predict future events.¹

12.3.3.2.7. *The Modal Uses of the Present Indicative.* The Semitic finite participle, which we suppose to be reflected in the Apc. by present indicatives, was in all likelihood the wholly unmarked member in the different oppositions within the Semitic verb system. It was therefore unmarked as opposed to *a.o.* the *yiqṭōl*, which was a futural-modal tense. This implies that according to context the finite participle could have the same values, and consequently we may expect that in the Apc. a number of present indicatives will be futural-modal in value. This we believe is the case in the following passages:

a) Pres. Ind. used finally or as a subjunctive:

XII 6 (Ⲭ, C) ἵνα ἐκεῖ τρέφουσιν (A: τρεφωσιν)

XII 14 ἵνα πέτῃτε (3 sg.) εἰς τὴν ἔρημον . . . ὅπου τρέφεται ἐκεῖ *etc.*

XIV 4 ὅπου ἂν ὑπάγει (Ⲭ, 046: υπαγει).

An alternative explanation may be that these are instances of the later merging of indicative and subjunctive due to phonetic change. In that case they can hardly have figured in the autographon.

Perhaps we should add: II 20 ἀλλὰ ἔχω κατὰ σοῦ ὅτι ἀφεῖς τ[ὴν γυ]-ναῖκα Ἰεζάβελ, ἣ λέγο[υσα] ἑαυτὴν προφῆτιν καὶ διδάσκει[ι καὶ] πλανᾷ τοὺς ἐμους δούλους, that is, if we consider διδάσκει as the equivalent of ἵνα διδάσκη, and make it depend on ἀφεῖς (Vulgate: *permittis* . . . *docere*).

b) Pres. Ind. with potential value: III 7 κλείων [χ]αὶ οὐδεὶς ἀνοίγει (Ⲭ: ανοιζει) "so that nobody will be able to open".

¹ Cf. Bousset, *o.c.*, p. 168 "ist die Schilderung im Futurum eigentlich jedesmal . . . ein Aus-der-Rolle-Fallen."

c) Clearly jussive is the pres. ind. in:

XIII 10 εἴ τις εἰς αἰχμαλωσίαν εἰς αἰχμαλωσίαν ὑπάγει (cf. the preceding: XIII 9 εἴ τις ἔχει οὓς ἀκουσάτω and the following XIII 10 εἴ τις ἐν μαχαίρῃ ἀποκτανθῆναι (δεῖ **κ**, **C**, 025, 046) αὐτὸν ἐν μαχαίρῃ ἀποκτανθῆναι.)

12.3.3.3. *Use of the Imperfect.* The imperfects in the Apc. are used as in non-Biblical Koine Greek, and offer no special problem with the exception of ἔλεγον/εἶπον. Just as elsewhere in the New Testament it is often difficult to get hold of this opposition in a given context.¹ For instance V 14 καὶ τὰ τέσσαρα ζῶα ἔλεγον· ἀμήν, καὶ οἱ πρεσβύτεροι ἔπεσαν καὶ προσεκύνησαν may be translated as “while the four cherubs were saying: amen etc.” but is this really meant? The actions referred to can also be seen as successive, and then it is difficult to say why ἔλεγον is used and not εἶπον.

Two instances of imperfects with a pro-preterite value are:

VI 9 τῶν ἐσφαγμένων διὰ . . . καὶ τὴν μαρτυρίαν ἣν εἶχον “which they had been giving”

XXII 8 καὶ ὅτε ἤκουσα καὶ ἔβλεπον “when I had heard and seen”.²

12.3.3.4. *Use of the Aorist Indicative.* The use of this tense has nothing peculiar in the Apocalypse. As a past non-durative tense it was almost the exact equivalent of the qāṭal category of Mishnaic Hebrew and Aramaic. As the qāṭal could according to context function as a futurum exactum we find the aorist a number of times serving as such:

X 7 ἀλλ’ ἐν τ[α]ῖς ἡμέραις τῆς φωνῆς τοῦ ἐβδόμου ἀγγέλου ὅταν μέλλῃ σαλπίζειν καὶ ἐτελέσθῃ τὸ μυστήριον τοῦ θεοῦ “and the mystery of God will have been fulfilled”

XI 10 καὶ δῶρα πέμψουσιν ἀλλήλοις [ὅτι οὗ]τοι οἱ δύο προφηταὶ ἐβασάνισαν [τούς] κατοικοῦντας ἐπὶ τῆς γῆς “because these two prophets will have tormented them”

XV 1 καὶ ἴδον . . . ἀγγέλους ἑπτὰ ἔχοντας πληγὰς ἑπτὰ τὰς ἐσχάτας ὅτι ἐν αὐταῖς ἐτελέσθῃ ὁ θυμὸς τοῦ θ(εο)ῦ “will have been fulfilled” (cf. XVI, 2 ss.).

XXI 4 ὁ θάνατος οὐκ ἔσται ἔτι . . . τὰ πρῶτα ἀπῆλθαν “will have passed”.

¹ But cf. Blass-Debrunner, *o.c.*, *par.* 329.

² At XXI 21 codex A has ἵνα against all mss. ἀνά. If original it would be the only instance of ἵνα with imperfect: “so that each of the gates was of one pearl”. Note that the subj. ὃ etc. are absent in the Apc., and that at XXII 14 ἵνα is used with the fut. ind. ἔσται.

Above we discussed the increasing fusion of the aorist and perfect indicatives. Besides perfects with an aoristic value the Apc. has also some instances of aorist indicatives with a perfective value:

- III 3 μνημόνευε οὖν πῶς εἴληφας καὶ ἤκουσας
 III 9 ὅτι ἐγὼ ἡγάπησά σε
 IV 11 σὺ ἔκτισας τὰ πάντα
 XI 17 ὅτι εἴληφας τὴν δύναμιν . . . κ. ἐβασίλευσας
 XIV 18 ἤχμασαν αἱ σταφυλαὶ αὐτῆς
 XVIII 3 κ. οἱ βασιλεῖς τῆς γῆς μετ' αὐτῆς ἐπόρνευσαν . . . ἐπλούτησαν

Aoristic participles with perfective value: XVIII 8 ὁ θ(ε)ὸς ὁ κρίνας αὐτήν and XVIII 15 οἱ ἔμποροι τούτων οἱ πλουτήσαντες ἀπ' αὐτῆς. These aorists are open to a twofold explanation. First they may be due to the increasing fusion of the aorist and perfect indicative in later Koine Greek. On the other hand some of our instances are certainly quotations from the Old Testament and owe their perfective value to the underlying qāṭal tense, which could also have a perfective aspect of meaning both in Biblical and in Mishnaic Hebrew: III 9 ἐγὼ ἡγάπησά σε from Isaiah XLIII 4 **אֲהַבְתִּיךָ יְהוָה**, and XI 17 κ.ἐβασίλευσας from Psalm XCIX 1 **לָךְ יְהוָה** (this verse not in LXX). The aorist in XVII 7 διὰ τί ἐθαύμασας may be a further instance, cf. Luke XVI 4 ἔγνων τί ποιήσω, but both can also be seen as real past tenses, however short the interval may be as compared with the moment of speaking. Compare from older times Aristophanes *Equites* 696 ἦσθην ἀπειλαῖς, ἐγέλασα ψολοκομπίαις (cf. *Nubes* 174, 185, 1240 and *Aves* 570).

Lancellotti holds the view that the timeless Biblical Hebrew qāṭal caused confusion in the use of the aorists in the Apc. in such a way that the latter have sometimes a futural value. He points a.o. to the following uses of the qāṭal as reflected in Greek:

a) "*Perfectum Confidentiae*": XIV 8 ἔπεσεν ἐπεσεν Βαβυ[λῶν] ἡ μεγάλη and the same in XVIII 2 with the addition of καὶ ἐγένετο κατοικητήριον δαιμονίων etc. We think that Lancellotti is right in considering XIV 8 a "proleptic past", especially as this passage is a quotation from Isaiah XXI 9 **לְבָבָהּ נִפְלְאָה** (LXX ms. B πέπτωκεν πέπτωκεν). It can, however, in our context also be understood as "the destruction of Babylon has now been decided".

In chapter XVIII the situation is quite different. This chapter does not tell us the events around the destruction of Babylon in a

chronological order: it depicts that Babylon has fallen (1-3), next the events preceding the destruction (4-7); after that the events following on the destruction are told (8-21), first in future tenses, then in past tenses (from 18 onwards); in *v.* 21 it is again prophesied that Babylon will be destroyed.

The order of this account is quite the reverse of the logical sequence of events, but we surmise that St. John has written so to achieve a special visionary effect. Note also that the angels who announce the different events are not said to come one after another and are devoid of ordinal numerals (*cf.* on the contrary *ch.* VIII-IX). Chapter XVIII is therefore either an extensive *hysteron-proteron*, or it is a sequence of more or less *parallel* visions. XVIII 2 ἔπεσεν may then be considered as an ordinary past tense, which is on a par with XVIII 1 εἶδον and 2 ἐκέκραξεν.

The aorists in XIV 7 ἦλθεν ἡ ὥρα and XIX 7 [ἦλθεν] ὁ γάμος *etc.* are in our opinion different cases which do not come under the heading of the *perfectum confidentiae*; they can be considered as aorists with a perfective value.

The only certain instance of the “*perfectum confidentiae*” is then XIV 8, which is sufficiently explained by the fact that it is a quotation.

b) “*Aorists of Predestination*” which express the divine disposition of future events:

XI 2 μὴ αὐτὴν μετρήσης ὅτι ἐδόθη τοῖς ἔθνεσιν. There is no need, we think, to treat this aorist as a future tense, and in the second instance

XVII 17 ὁ γὰρ θ(ε)ς ἔδωκεν εἰς τὰς καρδίας αὐτῶν ποιῆσαι τὴν γνῶμην αὐτοῦ, the aorist quite naturally may be considered as having the value of a pluperfect.

c) “*Perfectum Propheticum*”:

XI 10-12 [ὅτι οὗ]τοι οἱ δύο προφητὰι ἐβασάνισαν . . . εἰσῆλθεν . . . [ἔστη]σαν *etc.* The first aorist ἐβασάνισαν can be explained as a *futurum exactum*, and the whole further passage is in our opinion one of the instances where St. John takes up the original past tense of XI 1 καὶ ἐδόθη μοι κάλαμος ὅμοιος ῥάβδῳ

XVIII 17-19: see above under *b.*

XXI 23 ἡ γὰρ δόξα τοῦ θ(εο)ῦ ἐφώτισεν αὐτήν can be explained as an aorist with either the value of a perfect indicative or perhaps that of a pluperfect; in the latter case the past is on a par with v. 22 καὶ ναὸν οὐκ ἶδον ἐν αὐτῇ; it can even be seen as an ordinary past tense but in that case we would rather expect an imperfect.

We have shown above that there is regularity in the changes of time: in many cases there is a *group* of past tenses, followed by a *group* of present indicatives or nominal constructions, followed by a *group* of futures; after that the cyclus can begin again. This points rather to a successive relevance of respectively:

a) the past time when the visions were actually seen, or are pretended to have been seen;

b) the life picture of events and situations;

c) the prophetic character of the visions.

It is unnecessary to consider either the aorists or the futures as mistranslations. We think therefore that the above instances of Lancellotti's reflect on the whole the time when the visions were seen. None of them for that reason can be considered as running parallel to the O.T. use of the timeless qāṭal when it is used as a futural, as in the following passages:

Genesis XXIII 13 (the bargaining between Abraham and Ephron):

שְׁמַעֲנִי יְהוָה כִּי הָשָׁדָה קָח מִמֶּנִּי וְאַקְבְּרָה אֶת־מֵתִי

"Listen to me. I shall give the silver of the acre, take it from me that I may bury my dead" (LXX absent),

1 Samuel II 16:

כִּי עַתָּה תִּתֵּן וְאִם־לֹא לִקְחָתִי בְּהִזְקָה

"You shall give it now, if not I shall take it" (LXX λήμψομαι κραταιῶς).

12.3.3.5. *The Durative and Aoristic Subjunctives, Imperatives and Infinitives* require hardly any remarks. We have noticed, however, some instances of coordinated duratives and aorists. Imperatives: II 5 (III 3) μνημόνευε . . . καὶ μετανόησον, III 2 γίνου γρηγορῶν καὶ στήρισον, III 19 ζήλευε οὖν καὶ μετανόησον, X 8 ὑπάγε λάβε, XI 1 ἔγειρε καὶ μέτρησον. Infinitives: XI 6 στρέφειν . . . καὶ πατάξει. At V 3, however, the opposition between ἀνοῖξαι and βλέπειν (the verse is absent in A) is clearly significant.

In each of these passages one would expect two durative verbs, but possibly the author considered a second indication of the durative value superfluous, and used the unmarked aorist instead.

About the participles nothing needs to be remarked with regard to the opposition durative—aoristic. Both kinds are timeless in value as we have pointed out in *par.* 11.2.3.3.5. Durative participles with the contextual value of past time are in the Apc.:

- XII 10 ὁ κατηγορῶν αὐτούς
 XXII 8 κἀγὼ Ἰωάννης ὁ ἀκούων καὶ βλέπων ταῦτα
 XXII 8 τοῦ ἀγγέλου τοῦ δ(ε)ιγνύοντός μοι ταῦτα

Futural is: XIV 13 οἱ ἐν κ(υρί)ῳ ἀποθνήσκοντες ἀπ' ἄρτι

12.3.3.6. *The Use of the Futural Category.* The Mishnaic Hebrew and Aramaic *yiqṭōl* tense was non-durative and futural-modal in value. As such it was most aptly represented by the Greek future indicative which was likewise non-durative. That the Apc. is full of future indicatives which have a futural value needs hardly any illustration. We have seen above that there are 18 futures that are used as subjunctives, and that some of these occur after a preceding past indicative, *e.g.*

- IX 5 καὶ ἐδόθη αὐτοῖς . . . ἵνα β[α]σανισθήσονται
 XVII 17 ὁ γὰρ θ(εὸς) ἔδωκεν . . . ἄχρι τελεσθήσονται.

As such they may cover the contextual use of the *yiqṭōl* as a past future, just like the subjunctives which are used after past indicatives. An alternative rendering was *ἐμελλον* plus infinitive, which occurs in III 2 and X 4.

We have given our arguments for the assumption that the original number of future indicatives in the autographon may have been higher than in the Apc.-*mss* that we possess (*par.* 12.3.2.1). To these arguments we should like to add that a number of these “subjunctive futures” can almost be proved to have figured in the autographon, because no phonetic change could make tolerable subjunctives out of them:

- IV 9 δώσουσιν (aor. subj. δῶσιν, but **κ**, 046 δωσωσιν, and Sirach XV 20 A: ἔδωσεν)
 VIII 3 δώσει (aor. subj. δῶ, δόη, but Koine-text δωση)
 XIV 13 ἀναπαήσονται (aor. subj. ἀναπαῶσιν)
 XVII 17 τελεσθήσονται (aor. subj. τελεσθῶσιν)
 XVIII 14 εὐρήσουσιν (aor. subj. εὕρωσιν)
 XXII 14 ἔσται (subjunctive ᾧ, ῥς, *etc.*: absent in the Apc.).

The Semitic cursive *yiqṭōl* periphrasis (הִיְיָ plus participle) is not represented in the Apc. by ἔσομαι plus participle, but by the 17 durative subjunctives and by the periphrastic word group consisting of μέλλω plus durative infinitive (I 19, II 10, X 7, XII 5, XVII 8). The instances of the participle μέλλων *etc.* plus (durative or aoristic infinitive) may reflect the Hebrew combination of הַיְיָ plus infinitive (Aramaic: הַיְיָ plus inf.): III 10, VI 11, VIII 13, XII 4.

Modal aspects of meaning of the *yiqṭōl* tense which may have been taken over by the Greek future indicative are respectively:

a) The *Final-Consecutive Aspect* (without ἵνα or other final conjunctions):

XI 3 καὶ δώσω τοῖς δυσὶν μάρτυσίν μου καὶ προφητεύσουσιν “and I shall permit (or: order) my two witnesses to prophesy”;

XIV 10 (*mss.*) καὶ αὐτὸς πίεται ἐκ τοῦ οἴνου τοῦ θυμοῦ τοῦ θεοῦ . . . καὶ βασανισθήσεται (A: -σονται) ἐν πυρὶ *ss.* “so that he will be tortured”, and so possibly: II 23, III 10, (A: καὶ for οτι) XX 10;

b) The *Potential Aspect*: III 7 τάδε λέγει ὁ ἄλη[θε]ινός . . . [ὁ] ἀνοίγων καὶ οὐδεὶς κλ(ε)ίσει “so that nobody will be able to shut”;

c) The *Jussive-Adhortative Aspect*:

XXII 18 ἐάν τις ἐπιθῇ ἐπ’ αὐτὰ ἐπιθήσει ὁ θε(ε)ς (A** ἐπ αὐτῶ) τὰς πληγὰς *ss.* “if someone will make additions to these words, God may (must) add to him the punishments described in this book”, and so: IV 10, VI 11, IX 4, XVIII 21, XIX 7, XXII 19.

The Semitic *yiqṭōl* tense could also serve contextually as a *futurum exactum*, just as the *qāṭal* tense. Besides aorist indicatives (see *par.* 12.3.3.4) we find therefore also some future indicatives in the Apc. which perform this task:

II 22 ἰδοὺ βάλλω . . . τοὺς μοιχεύοντας . . . εἰς θλῖψιν μεγάλην ἐάν μὴ μετανοήσουσιν “if they will not have repented”;

XVII 17 ὁ γὰρ θε(ε)ς ἔδωκεν εἰς τὰς καρδίας αὐτῶν ποιῆσαι τὴν γνώμην αὐτοῦ (the Beast) . . . ἄχρι τελεσθῆσονται οἱ λόγοι τοῦ θε(ε)οῦ “until the words of God will have been fulfilled”. The aorist subjunctive may have the same function *e.g.* XI 7 καὶ ὅταν τελέσωσιν τὴν μαρτυρίαν αὐτῶν “and when they will have finished”.

12.3.3.7. *Excursus on Apocalypse IV 9-11.* One of the passages which plays an important rôle in Lancellotti’s exposition on the use of tenses in the Apocalypse is IV 9-10. As it contains four future

indicatives which are claimed to be used as past tenses we will discuss this passage in detail. It runs as follows:

- IV 9 καὶ ὅταν δώσουσιν τὰ ζῶα δόξαν καὶ τιμὴν καὶ εὐχαρισ-
τείας τῷ καθημένῳ ἐπὶ τῷ θρόνῳ τῷ ζῶντι εἰς τοὺς αἰῶνας τῶν
IO αἰώνων, πεσοῦνται οἱ εἴκοσι τέσσαρες πρεσβύτεροι ἐνώπιον
τοῦ καθημένου ἐπὶ τοῦ θρόνου καὶ προσκυνήσουσιν τῷ ζῶντι
εἰς τοὺς αἰῶνας τῶν αἰώνων καὶ βαλοῦσιν τοὺς
II στεφάνους αὐτῶν ἐνώπιον τοῦ θρόνου λέγοντες· ὁ ὁ
κ(ύριος) καὶ ὁ θ(εὸς) ἡμῶν *etc.*

The preceding lines give us a picture of heaven, the throne of God, the cherubs surrounding it, and of the 24 elders sitting on their thrones; the final remark is about the cherubs and tells us that they were saying night and day: "Holy, holy, holy", without a break.

Only two of the futures in our passages have textual variants:

v. 9: A δωσουσιν, **κ** 046 δωσωσιν, **℞** δωσιν, Prim. *dederant*, Giga*s dederunt* (for δωσωσιν *cf.* the aor. ind. ἔδωσεν in Sirach XV 20 (*ms.* A))

v. 10: A βαλοῦσιν, **κ** 046 βαλλουσιν.

There can be no doubt that these variants embody corrections which try to get rid of the futures as they were difficult to interpret; we believe therefore that the futures as the *lectio difficilior* are the original wording of the text.

Which Semitic tenses may they reflect? The answer depends of course on the languages that we adduce. As our passage is not a quotation from the O.T. we do not think any influence from Biblical Hebrew very likely, and consider these futures as representing the Mishnaic Hebrew or Aramaic *yiqṭōl* tense. It is less likely that the underlying verbs were Semitic participles because these would have resulted in Greek participles or present indicatives like those found in the section which precedes our passage: v. 7 ἔχων . . . 8. ἔχων . . . γέμουσιν . . . ἔχουσιν . . . λέγοντες . . .

Lancellotti and Charles, however, hold the view that these futures reflect *Biblical* Hebrew *yiqṭōl* tenses having a past-iterative value. In other words, the futures would here be equivalent to imperfects. Lancellotti translates: "*ogni volta che i 4 viventi davano gloria . . . , i seniori cadevano*", *etc.*¹ This view is already old aged, for the Vulgate has: "*et cum darent illa animalia gloriam . . . , procedebant*

¹ *o.c.*, p. 65.

viginti quattuor seniores . . . et adorabant . . . et . . . mittebant' etc. (Primasius: *cum dederant*; Gigas: *cum dederint*).¹

Several objections can be made against this view. Even when we accept influence from Biblical Hebrew we must say that St. John could hardly have chosen any Greek verb category which was more remote in value from a past-iterative tense than the non-past and non-durative Greek future indicative, even less so, as it appears from elsewhere in the Apc. that St. John knew how to handle the imperfect category. The equation: Greek future = past durative *yiqṭōl* would be valid only if the Semitic indicatives had been reproduced in a mechanical way by not more than two Greek tenses, say the aorist and the future, but this is not the case in the Apc. There are also problems the other way round: a translation as given by the Vulgate or Lancellotti would not suppose in an original *Biblical* Hebrew text a combination of two *yiqṭōls*, but rather a *casus pendens* (usually a participle) followed by a second participle.²

We think that the evaluation of these futures as past tenses is due to the exegesis of the whole chapter, more particularly to the assumption that the picture of the usual(?) situation in heaven includes what is said in *vv.* 9-10 ἦσαν δόσουσιν . . . δόξαν καὶ τιμὴν καὶ εὐχαριστείας, and that the trishagion is perhaps part of this doxology. That this cannot be a priori excluded is shown by 1 Enoch XXXIX 12 "Those who sleep not bless Thee: they stand before Thy glory and bless, praise and extol saying: 'Holy, holy, holy, is the Lord of Spirits . . .'.³

Accepting this view for a moment we should even then keep in mind that St. John's picture of heaven and what happens there ultimately means to show what will happen in future, as the first line of the same chapter runs: ὅσα δεῖ γενέσθαι μετὰ ταῦτα (IV 1). Although the author started by using a past tense (IV 2 ἔκειτο), he continues more vividly in nominal sentences, present indicatives and participles, and finally uses future indicatives indicating in this way again that all that he sees has not yet taken place. The use of tenses in this chapter is therefore not different from the similar shifts of time which we have seen in the discussion of the use of the

¹ Cf. also G. H. A. Ewald, *Commentarius in Apocalypsin exegeticus et criticus*, Leipsic 1828, p. 38.

² Gesenius-Kautzsch, *o.c.*, par. 164; R. Joüon, *Grammaire de l'Hébreu biblique*, Rome, 1947, 2nd ed., par. 166e.

³ R. H. Charles, *Apocrypha and Pseudepigrapha of the Old Testament*, Oxford, 1913, vol. II, p. 211.

present indicative. Consequently there is no need to adduce *Biblical Hebrew past* yiqṭōls.

There are, however, more objections to be made. It may be doubted whether *ἔταν δώσουσιν etc.* does really refer to actions which are just as frequent as the Thrice Holy. First of all the use of *ἔταν* does not necessarily imply repetition, especially not so in the Apc. where *ἔταν* can be equivalent with *ἔτε*, even before a past tense, for instance in VIII 1 where the 7th seal is opened, an event which happens only once in the Apc.: *καὶ ἔταν ἤνοιξεν τὴν σφραγίδα τὴν ἑβδόμην* (Vulg.: *et cum aperuisset*). In IV 9 *ἔταν* can therefore imply a unique event just as it does in XI 7, XII 4 *etc.* Compare Lohmeyer's commentary ad locum: "*ἔταν ist einmalig*".¹ As it is said in the text, the ἄξιός-song is to follow on a situation in which δόξα, τιμὴ and εὐχαριστία are given to *God*. This happens in the strict sense only *once* in the context, namely in V 13: the angels, elders and cherubs have exclaimed (V 12): ἄξιός ἐστιν τὸ ἄρνιον . . . λαβεῖν . . . τιμὴν καὶ δόξαν καὶ εὐλογίαν. This doxology is taken over in a slightly modified form by all the creatures in heaven and on earth and addressed to *God* and to the Lamb: V 13 τῷ καθημένῳ ἐπὶ τῷ θρόνῳ καὶ (A, *8^c* omit καὶ) τῷ ἄρνιῳ ἡ εὐλογία καὶ ἡ τιμὴ καὶ ἡ δόξα καὶ τὸ κράτος εἰς τοὺς αἰῶνας τῶν αἰώνων. After that it is expressly stated in V 14: καὶ τὰ τέσσερα ζῷα ἔλεγον· ἁμήν. καὶ οἱ πρεσβύτεροι ἔπεσαν καὶ προσεκύνησαν. It is true that before this climax is reached the cherubs and elders have already knelt down once and sung an ἄξιός-song but to the *Lamb* only when He takes the "Book with the Seven Seals": *vv.* 8-9 ἄξιός εἰ λαβεῖν τὸ βιβλίον *etc.*

This is, however, quite a different occasion to which IV 9 cannot be supposed to refer; the same holds good of the kneeling of the elders in XI 16 and XIX 4 where, moreover, the ἄξιός-song is absent. It is therefore highly probable that IV 9 refers to V 13-14 only. We must, however, admit that the actions predicted in IV 8-10 are not performed in due order in V 13-14 because the ἄξιός-song should not precede the doxology and the kneeling, but come afterwards: we think this is one of the instances of St. John's freedom with regard to order which is also displayed in VIII 5 *ἄστρα παῖ καὶ φωναί*, where the thunder blows precede the flashes of lightning.²

¹ E. Lohmeyer, *Die Offenbarung des Johannes* (Handb. zum N.T. 16), Tübingen, 1953, 2nd ed., p. 49.

² Charles, *The Revelation etc.*, I, p. CLIX. In this connection it is also

Our assumption that IV 9-10 refer to unique events seems corroborated by some other facts. Delling has made it clear that these ἄξιός-songs can be compared with the acclamation of the Roman emperors, which was an event that took place only when their soldiers proclaimed them as such, for instance the acclamation of the emperor Probus (Script. Hist. Aug. *Probus* XI 9): “*fuisti semper dignus imperio*”. Delling remarks: “*Es ist kaum zufällig, dass Würdig-Rufe in Apc. später nicht mehr begegnen. Die mit dem Würdig-Ruf Prädisierten verwirklichen im Endgeschehen ihre Macht, die ihnen durch diesen Ruf feierlich zugesprochen wird*”.¹ According to Lohmeyer the word ἄξιός played the same, important rôle in the enthronisation rite of the bishops, and probably also in the cérémonie protocolaire around the conquerors in the Olympic games.² It authorized a person to perform his new function or to accept the reward when he had been found ἄξιός. For these reasons we cannot see the ἄξιός-song as a too frequent event in the Apc.: V 9 and 12 are the only instances and if δώσουσιν is a simple future and not a futurum exactum, one cannot possibly assume that the trishagion song, ἄγιος ἄγιος ἄγιος κ(ύριος)ς ὁ θ(εὸς)ς ὁ παντοκράτωρ, ὁ ἦν καὶ ὁ ὢν κ. ὁ ἐρχόμενος, is referred to by IV 9 ὅταν δώσουσιν . . . δόξαν καὶ τιμὴν καὶ εὐχαριστείας as in the Enoch-passage above, and was followed each time by an ἄξιός-song and an almost continuous kneeling down, etc.

It is highly improbable that the future tenses in IV 9-10 refer to the past time: that would be contrary to the value of this category in Greek and likewise conflict with the value of the yiqṭōl in Mishnaic Hebrew and Aramaic. We think it also improbable that the events referred to were reiterated actions. As to the exact value which these futures do have in our passage we believe that the context allows of several alternatives. All four verbs may refer to *future* actions.³ We have shown that shifts to the future tense are found elsewhere in the Apc., and if unique events are here predicted

curious to see that St. John reverses each time the order of the elements: IV 9 δόξαν (1) . . . τιμὴν (2) . . . εὐχαριστείας (3) . . . τῷ καθημένῳ (4), but in V 13: 4-3-2-1; IV 11 δόξαν (1) . . . τιμὴν (2) . . . δύναμιν (3), but in V 12: 3-2-1 (partly separated by other words).

¹ G. Delling, *Zum gottesdienstlichen Stil der Johannes-Apokalypse*, Novum Test. III, 1959, pp. 107 ss. and p. 115; Lohmeyer, *o.c.*, p. 50.

² Lohmeyer, *o.c.*, p. 50; E. Peterson, EIC ΘEOC, Göttingen 1926, pp. 176-177.

³ Cf. G. B. Winer, *Disputatur de Soloecismis qui in Apocalypsi Joannea inesse dicuntur*, Erlangen 1825, p. 7.

that will take place later on in the visions, such a shift would be quite functional.

Since the actions of the elders are to follow upon the doxology by the cherubim one might also suppose that δώσουσιν is a futurum exactum "when they will have given honour". We have seen that the *yiqṭōl* could have this function too, and in this case it would be possible to consider the ἄξιος-song as included in δώσουσιν δόξαν *etc.*, if V 13-14 were not there. As to πεσοῦνται, προσκυνήσουσιν and βαλοῦσιν there is the alternative that they have a jussive value: "when the cherubs *will have* given honour . . . the elders *have to* fall down".

12.3.3.8. *The Perfective Categories.* All the Greek verb categories which belong to this subsystem have no exact equivalent in Mishnaic Hebrew or Aramaic with the exception of the perfective middle participle. The perfect and pluperfect indicatives render more or less the qāṭal tense but a better equivalent is the aorist indicative.¹

Since we have seen that the perfective tenses with the exception of the middle participle were dying out in Koine Greek it need not wonder that the total number of perfect indicatives in the Apc. is as low as 21. In this number the 11 occurrences of οἶδα are not included because we do not consider it as the perfect tense corresponding to εἶδον. A doubtful case is ἔστηκα which was giving way in our period to the new present indicative στήκω; the perfective value of ἔστηκα was evidently disappearing. This may explain why only this verb in the Apc. has a pluperfect by its side (VII 11), which would then be equivalent to an imperfect, and also why ἐστήκασιν is the only 3rd person plural in -σιν, whereas the other perfects have -ν: XVIII 3 πέπτωκαν, XIX 3 εἴρηκαν XXI 6 γέγοναν. The material is, however, too scanty to draw any conclusions, for elsewhere we may perceive that the reverse phenomenon occurs likewise *i.e.* aorists with -σιν instead of -ν: ἀπήλθασιν (Protev. Jac. p. 21, 6, 11), εἶπασιν (p. 17, 12 L, but Z: εἶπαν), εὔρασιν (p. 21, 7-8 L); on the other hand even the 3rd p. pl. of οἶδα may have -ν: οἶδαν (p. 35, 12-13 ZA).² A better indication of the non-perfective value of ἔστηκα *etc.* is that there occur no other active perfective participles

¹ It is curious to learn from S. A. Birnbaum, *Grammatik der jiddischen Sprache*, Hamburg 1966, 2nd ed., p. 47, that in Yiddish, too, the pluperfect and future perfect are (were) rarely used.

² E. de Strycker, *La Forme la plus ancienne du Protévangile de Jacques*, Studia Hagiographica 33, Brussels, 1961, p. 247.

in the Apc. except ἐστηκώς or ἐστώς (11 times) and πεπτωκότα (once: IX 1).

Of the perfect indicatives four have an aoristic value:

- V 7 καὶ ἦλθεν καὶ εἴληφεν ἐκ τῆς δεξιᾶς τοῦ καθημένου . . .
 VII 13 καὶ ἀπεκρίθη . . . 14. καὶ εἶρηκα . . .
 VIII 5 καὶ εἴληφεν ὁ ἄγγελος τὸν λιβανωτόν, καὶ ἐγέμισεν . . .
 XIX 3 καὶ δεύτερον εἶρηκαν· ἄλληλουϊά.

It is striking that these verbs happen to be those which have no reduplication or vowel modification but the element εἰ-. This is also the case with the perfects with aorist value that occur in the 1st century papyri. It is therefore probable that the fusion of aorist and perfect started with these verbs because formally they were hardly different from such aorists in -κα as ἔδωκα, ἔθηκα.

The middle participle occurs frequently in the Apc.: 67 times, and it has remained alive till modern times. It reflects certainly the Semitic gerundive qāṭul. Passages in which the Greek middle perfective participle has possibly taken over this gerundive value of the qāṭul category are:

- XIII 8 αἰγέγραπται (*i.e.* ἐγγέγραπται) τὸ ὄνομα αὐτοῦ ἐν τῷ βιβλίῳ τῆς ζωῆς τοῦ ἀρνίου τοῦ ἐσφαγμένου ἀπὸ καταβολῆς κόσμου "the Lamb which was to be slaughtered from the foundation of the world"
 XVIII 2 φυλακὴ παντὸς θηρίου ἀκαθάρτου καὶ μεμεισημένου, Vulgate: "omnis volucris immundae et odibilis", mss.: ορνέου instead of θηρίου.

12.3.3.9. *Conclusions.* As to the use of tenses we believe that the Apc. is peculiar only in the choice which St. John makes of the different verb categories. We shall therefore list those categories which we have found to be frequent in the Apc.; these categories are the following: the present indicative, durative participle, aorist indicative, aorist imperative and infinitive, the future indicative and the middle perfective participle. The present indicative and durative participle have been shown to represent two usages of the Semitic participle; the future indicative and aorist subjunctive represent likewise only one category: the yiqṭōl. If we consider these pairs each as one category we can combine the frequent categories in the following scheme:

aor. ind.	aor. imp.	aor. inf.	pres. part./pres. ind.	middle perf. part.
fut. ind./ aor. subj.				

This scheme is wholly identical to that of a subsystem of the Semitic verb *e.g.*.

qāṭal	qəṭul	qəṭōl	qōṭəl	qāṭul
yiqṭōl				

St. John betrays his Semitic vernacular therefore by the choice which he makes involuntarily of the Greek categories and not so much by striking Semitisms in the use of each category. The Greek verbs have their Greek values, but some of the aspects of their values occur more frequently due to the Semitic substrate: the aorist and fut. indicative used as “futurum exactum”, the fut. indicative used as a past future and in a jussive sense. The Semitic colour of the verb in the Apc. is therefore mainly a stylistic matter. There are, however, some typical Semitic aspects of meaning: the modal use of the present and fut. indicatives and the gerundival value of the middle perfective participle. The timeless use of the present indicative has nothing to do with a Semitic substrate, but is as such the value of that category. (Lancellotti traces it to the Biblical *yiqṭōl*).

The shifts of time which we have discussed are caused by the apocalyptic “genre”: the visions reported were seen in the past, can be vividly pictured by present indicatives, but predict the future. It is therefore not accidental that there are no shifts of time in non-visionary parts like the Letters to the Seven Churches.

CHAPTER THIRTEEN

FINAL REMARKS

Resuming the different kinds of problems sketched in our first chapter we may now ask to what degree our analysis of St. John's use of the morphological categories of Koine Greek has helped to solve them.

13.1. *Problems of Interpretation*

Although these problems were not our main concern we have touched upon many of them, especially in the sections on the categorial values. Our index of passages quoted may be helpful in finding the short discussions devoted to them (14.1).

13.2. *Problems of Text Composition*

The linguistic peculiarities which we have found are not restricted to special portions of the Apc. As many characteristics of St. John's use of language consist in the very absence or practical absence of a number of Greek categories it may be illustrating to show the distribution of the words that belong to such infrequent categories as the imperfects, the degrees of comparison and the adj. adverbs ending in -ως:

Imperfects: I 12 (A: pr. ind.), II 14, V 3, 4 (A. *om.*), 14, VI 8, 9, (VII 2: A only), VII 9, IX 8, 9, XIII 11, 11, XIV 3, XV 8, XVI 10, XIX 14, XXI 15, XXII 8;

Degrees of Comparison: II 19, XVIII 12, XXI 11;

Adj. Adverbs in -ως: II 15, IV 2, VIII 12, XI 8.

From this list it clearly appears that the more rarely used categories are scattered all over the book, and the same holds good of those phenomena that are characteristic of the Apc., for instance the participles used as finite verbs, which are distributed as follows: I 16, IV 2, 4, 5, 7, 8, V 6, VI 2, 5, IX 17, 19, X 2, 8, XII 2, XIV 1, 14, XIX 11, 12, 13, XXI 12, 12, 14, 19.

From what we have seen of syntax it appears that the exceptions to St. John's word order are likewise scattered through the text, except for the instances of pronouns preceding a verb or substantive: these occur 10× in the Letters to the Churches (*ch.* II-III),

whereas the remaining 10 instances are located: I 7, X 9, XI 5, 5, 5, XII 15, XIV 18, XVI 6, XVII 7 (8, 025), 16, XVIII 5. This distribution we think does not prove that these letters were composed by another person; the relative frequency of preposed pronouns may be explained from the fact that in all of them the dispatcher Christ more or less opposes himself to the addressee. Note that they contain also the only instance of a possessive pronoun, likewise preposed (II 20), that 7 out of the 10 sentences in the Apc. that are headed by a 1st person verb are the opening lines of these letters, and also that 9 out of the 20 nominatives ἐγώ, σύ occur in these chapters. In conclusion we may say that we do not see any reason for questioning the unity of the Apc. on linguistic grounds. As to the many interpolations which Charles has assumed because of some linguistic-stylistic unevenness we reject the underlying idea that an author's style must be so rigid as not to allow of the slightest exception. Besides that it might turn out as the result of a more profound investigation in the field of word order why the author deviates from specific tendencies. Moreover, we think it a statistical error to consider a passage to be an interpolation because the idiom is different from only four or six opposite instances.¹

13.3. *Problems of Date and Place*

The linguistic peculiarities as such do not point to a specific era or area. In solving these problems we shall have to remain dependent on non-linguistic evidence. All that we have been able to conclude here was a rather vague terminus ante quem based on the absence of the orthographical variation υ-ου from our best *ms.*, the Codex Alexandrinus. This led to the exclusion of Egyptian Koine-Greek as the original language, which is hardly surprising in view of the fact that the author himself mentions Patmos and Western Asia Minor as the setting of his visions.

13.4. *Problems of Authorship*

As far as the morphological data can tell us we hold it highly improbable that both the Apc. and the Corpus Johanneum were composed by one and the same author, because several of the categories that are seldom used in the Apc. or not at all, are not

¹ Charles, *o.c.*, I, p. CLVI *e.g.* Apc. XVII 9 and 15.

unusual in the Johannine writings, such as the perfect indicative.¹ On the other hand it is a telling fact that such a peculiarity as the appositional use of the nominative with *any* antecedent case is wholly absent from the 4th Gospel. Although we have not dealt with the word order of the Apc. we have a sufficient impression of it to be able to say that it is widely divergent from that of the remaining N.T., including the 4th Gospel. To mention one instance: the adjective in the Apc. is always placed after the substantive but not so in the Johannine works. The vocabulary is likewise different, also where it cannot be said to depend on the subject matter. For instance, the pronoun ἐκεῖνος is rare in the Apc. (3×) but frequent in the Gospel (70×); οὐκέτι is never split up in the Gospel, but 17× so in the Apc.: οὐκ . . . ἔτι; *ecce* is always ἰδοὺ in the Apc. (30×), but ἴδε in the Gospel (22×), except in three passages of which one is a LXX-quotation; the possessive pronouns like ἐμός, σός *etc.* are used once (Apc. II 20), but 51× in the Corpus Johanneum.

Conclusion. The linguistic and stylistic divergence of the Apc. on the one hand and the Gospel and Letters of St. John on the other, proves beyond any reasonable doubt that all these works as we have them before us were not phrased by one and the same man. The theory that the author of the Apc. had improved his style when writing the Gospel is likewise to be rejected: if one should remove the un-Greek idioms from the Apc. the result would be far from identical with the use of Greek as found in the 4th Gospel.

13.5. *Bilingualism.*

As we have shown the morphological data cannot furnish any answer to the question whether the linguistic background of St. John was Hebrew or Aramaic. The morphological systems of both these closely related languages are hardly different in structure. The most striking point of difference may be the Aramaic status determinatus as opposed to the Hebrew word group consisting of article plus substantive, but this Aramaic peculiarity is never reflected in Greek by postposition of the article as far as we know. It is even highly probable that our phrase "Hebrew *or* Aramaic"

¹ According to Chantraine, *o.c.*, p. 229 there are 77 "resultative" perfects in the Fourth Gospel, and 100 intransitive perfects. His remark that the Apc. "*se trouve dans une situation analogue . . . mais moins nette.*" (p. 230) cannot be maintained.

suggests a problem which does not exist: both languages most likely influenced an author who was so well versed in Ezekiel *and* Daniel, and who lived in a period when both languages were used by each other's side.

Nevertheless we are slightly in favour of assuming Hebrew influence because of some facts which point to that language only, such as the δισμυριάδες in IX 16 which represents a Hebrew multiplicative dual, a category absent from Aramaic, and also because of a peculiarity in the order of the infinitive and its substantive object: in the Apc. the latter follows the former (41×), just as it practically always does in Biblical Hebrew, and possibly also in Mishnaic Hebrew, but in the different Aramaic dialects both sequences occur.¹ As the syntactical differences between Hebrew and Aramaic are only slight such a lonely case cannot be convincing. Moreover, we should keep in mind that these rather Hebrew phenomena in our Greek text may also represent Hebraistic turns in St. John's use of Aramaic.

¹ Segal's grammar of Mishnaic Hebrew does not discuss the place of the object substantives with the infinitive. J. Carmignac discusses the problem in detail adducing Accadian, Ethiopian, the different kinds of Aramaic (Sefiré, Elephantine, Daniel, Qumrân, Murabba'ât, Syriac) and Biblical and Qumran Hebrew: *Un Aramaisme biblique et qumrânien, l'infinitif placé après son complément d'objet*, *Revue de Qumran* V 1966, pp. 503 ss.

CHAPTER FOURTEEN

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14.4. *Errors and Additions*

- p. 6, n. 2 l. 8: *ists*
 p. 24 l. 17: occurs
 p. 25 l. 2: doubtful
 p. 40, n. 1 l. 4: and C cf.
 p. 41 l. 5: ου[u]

- p. 46 l. 23; p. 226 l. 2: Atticistic
 p. 53 l. 15: ἀμνός
 p. 54 l. 7: admitted
 p. 70 l. 28: [pitá-on]
 p. 84 l. 3 delete: to

p. 85 *l.* 27: words
p. 88 *l.* 30: or
p. 93 *n.* 2; *p.* 314, *n.* 2 *l.* 2; *p.* 324 *l.* 16: Habakkuk
p. 97 above and *l.* 32: 6.2.4.4.4.
p. 125 *l.* 38; 126 *l.* 3: μήτηρ
p. 126 *l.* 28: *Iliad* K
p. 131 *l.* 23: ἰδοῦς
p. 137 *l.* 11: σοφίζειν
p. 162 *l.* 9: plurals
p. 186 *l.* 9: πῶστος
p. 204 *l.* 17: centum

p. 207, *l.* 18: originally
p. 209 *l.* 5: ὁπόδοι, ὁποδακοῦ
p. 210 *l.* 36: 10.3.2.3.
p. 222 *l.* 9: δυάζω
p. 232 *l.* 8: pleonastic
p. 232 *l.* 16: several, if not all
p. 285 *l.* 23 delete: and Mood
p. 287 *l.* 6: 11.3.10
p. 298 *l.* 11: Canticles
p. 334 *l.* 20: Shepherd
p. 338 *l.* 8 for x. read: καὶ

Additions

- p.* 33 *n.* 2 after Neh. XI 1: (*i.e.* 2 Esdr. XXI 1)
p. 119 *l.* 5: That is, only in paradigms of words denoting weights, measures, subdivisions of time, 'a hundred', 'a thousand', and the like.
p. 174 *n.* 1: Also in Dioscurides *De mat. med.*, see L. Rydbeck, *Fachprosa, Vermeintliche Volkssprache und Neues Testament*, Uppsala 1967, *p.* 98 ss., *p.* 105 s.
p. 177 *l.* 3: ὅστις has in this case a general-indefinite sense: 'whoever'; ὅστιδοῦν *etc.* are obsolete.
p. 183 *l.* 3: for '*par.* 4' read '*par.* 4.4'; add: Also τινές . . . τινές and ποτὲ . . . ποτὲ (*p.* 184) when mutually opposed: 'some . . . others', 'at one time . . . at another'.
p. 200 The survey of the adverbs should also contain τίς: πῶς, ποῦ, πόθεν, πότε.
p. 222 *l.* 4: The accent of ἐπτετης is uncertain, it may have been final or penult.
p. 237 *ll.* 32-33: The former three verbs are rather causative-reflexive; *cf.* instead ὑποταγῆναι (James IV 7), ταπεινωθῆναι (James IV 10), ὁμοιωθῆναι (Acts XIV 11), φανερωθῆναι (John XXI 14, *vs. v.* 1!), ἀποστραφῆναι (Matt. V 42; 2 Tim. I 15 *cf.* IV 4); see also M. Zerwick, *Biblical Greek*, Rome 1963, *p.* 74 s.; Blass-D., *o.c.*, *par.* 307
p. 237 *l.* 38: for 'constituting' read: 'tending to constitute in non-literary use'
p. 260 *l.* 24: *cf.* also Moeris (*ed.* Bekker) *p.* 194 *s.v.* δεδήσεται, *p.* 206 *s.v.* πεπράσσομαι.
p. 266 *l.* 32: N.T. instances of imperfects with adverbs of suddenness are: Mark V 42, Acts IX 20.
p. 284 *l.* 15: The accent of the aor. imp. of compounds is penult or antepenult ἄφες, ἄφετε, ἄφεσθε (obsolete), but ἀφοῦ (obsolete).
p. 297 *l.* 16: The middle aor. ἀφείμην (B: ἀφε-, ἀφ-) is obsolete in non-literary Koine Gk.